



TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY

***Investing in the 21st Century
Skilled Filipino Workforce***

**The NATIONAL TECHNICAL EDUCATION
AND SKILLS DEVELOPMENT PLAN
2011 - 2016**

TESDA Complex, East Service Road, South
Superhighway, Taguig City, Metro Manila
www.tesda.gov.ph

September 2011

Table of Contents

Preface	i
Acknowledgement	ii
Abbreviations	iii

The Plan

Chapter 1	Introduction	1
Chapter 2	TVET: Overview & Perspective	3
Chapter 3	Planning Context	15
Chapter 4	Strategic Directions	21
Chapter 5	Implementing for Results	33

References

Plan Companion Documents

A. TVET Training Targets Per Sector 2011-2016

B. TESDA Investment Requirements 2011-2016

Preface

The 3rd Cycle National Technical Education and Skills Development Plan (NTESDP) 2011-2016 is a unique undertaking. While it builds on the gains and lessons of two previous NTESDPs, it carves out new inimitable pathways for technical vocational education and training (TVET) in the medium-term. Themed “*Investing in the 21st Century Skilled Filipino Workforce*”, the Plan outlines innovative strategies to guide the major TVET actors on the courses of action that need to be carried out to address the economy’s future skills requirements.

Anchored on the Philippine Development Plan 2011-2016 and the Labor and Employment Plan 2011-2016, the NTESDP 2011-2016 seeks to contribute to achieving the vision of inclusive growth through the improved provision of TVET. As a means by which workers’ productivity and employability are enhanced, TVET is seen as a primary enabler that allows the active and meaningful participation of workers in the development process.

The NTESDP is mainly directional and its operational translation takes place in the Regional and Provincial Technical Education and Skills Development Plans (R/PTESDPs). The R/PTESDPs, to be determined and implemented at the regional and provincial levels, shall provide the area and sector-specific skills development requirements and program interventions. Essentially, the corresponding financial requirements for the implementation of the NTESDP and the R/PTESDPs are contained in an accompanying Investment Plan.

The TESDA, as oversight body of the NTESDP process, understands that the successful implementation of the NTESDP, a collective contribution from myriad stakeholders, necessitates intensive monitoring and evaluation. Consultations, therefore, are regarded an intrinsic part of the whole program management cycle to ensure that the desired plan results are achieved.

Since TVET is deemed to be of significance, for reasons economic and social, to current and future generations alike, it is our hope that this NTESDP 2011-2016 will serve as an excellent guide to assisting all stakeholders move from goal to goal and from strength to strength.


SECRETARY EMMANUEL JOEL J. VILLANUEVA
Director General

Acknowledgement

The formulation of the National Technical Education and Skills Development Plan (NTESDP) 2011-2016 3rd Cycle is a product of the concerted efforts of various TVET stakeholders. It was made possible by the guidance, support and assistance of several individuals and groups who in one way or another contributed and extended their valuable time and inputs in the preparation and completion of this Plan.

The NTESDP is anchored on the Philippine Development Plan, 2011-2016 that defines the priority thrusts of the Aquino administration for the next six years. Likewise serving as basis is the Labor and Employment Plan, 2011-2016 whose basic strategy is inclusive growth through decent and productive work.

Towards the realization of a comprehensive plan for TVET, sectoral and multi-level consultations were undertaken. The active participation of the TESDA Industry Partners during the industry consultations that elicited vital information/insights in the identification of issues and concerns in the priority sectors for inclusion in the Plan is highly appreciated. Likewise, the comments and inputs of the Inter-Agency Committee resulted in the enhancement of the Plan.

It is also noteworthy to commend the valuable contributions of the TESDA National Directorate, the TESDA Provincial/District Directors, and the inter-office committee at the Central Office.

The plan is also a product of discussions and presentations with multisectoral bodies at the local and national levels. Gratitude is due to the Regional/ Provincial Technical Education and Skills Development Committees (R/PTESDCs), the Regional/ Provincial Development Councils (R/PDCs) and other organized bodies for the review and endorsement of their respective Regional and Provincial Technical Education and Skills Development Plans (R/PTESDPs) which serve as the twin documents of the NTESDP.

Our utmost gratitude to the TESDA Board, the Social Development Committee– Technical Board and Cabinet Level (NEDA) for their unselfish time and commitment in the review and approval of the Plan.

To the Plan writers who after patiently writing and rewriting the Plan have come up with a manuscript that defines the priority thrusts for the TVET sector.

Finally, to all individuals and organizations who in one way or another contributed their time, effort and ideas in enhancing the Plan document, accept our warmest gratitude to all of you.

Abbreviations

AFAS	ASEAN Framework Agreement on Services
ALS	Alternative Learning System
APACC	Asia-Pacific Accreditation and Certification Commission
APEC	Asia-Pacific Economic Cooperation
ARMM	Autonomous Region of Muslim Mindanao
ASEAN	Association of South East Asian Nations
ASEM	Asia-Europe Meeting
BIMP-EAGA	Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area
BLES	Bureau of Labor and Employment Statistics
BPO	Business Process Outsourcing
CHED	Commission on Higher Education
COC	Certificate of Competency
DA	Department of Agriculture
DepEd	Department of Education
DFA	Department of Foreign Affairs
DILG	Department of the Interior and Local Government
DOLE	Department of Labor and Employment
DOTC	Department of Transportation and Communications
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
DTS	Dual Training System
EBT	Enterprise-Based Training
EDCOM	Congressional Commission on Education
EER	Efficiency and Effectiveness Review
ERP	Economic Resiliency Plan
EU	European Union
FTA	Free Trade Agreement
FTAAP	Free Trade Area of the Asia-Pacific
HOTS	Higher Order Thinking Skills
I-CARE	Invigorating Constituents Assistance in Reinforcing Employment
ICT	Information and Communications Technology
ICT4E	ICT for Education
IES	Impact Evaluation Study
ILO	International Labor Organization
IMO	International Maritime Organization
ISO	International Organization for Standardization
JPEPA	Japan-Philippines Economic Partnership Agreement
K to 12	Kindergarten to 12
KAS	Knowledge, Attitudes and Skills
LEP	Labor and Employment Plan
LEP	Ladderized Education Program
LGU	Local Government Unit
LMI	Labor Market Information
LMIR	Labor Market Intelligence Report

MARINA	Maritime Industry Authority
MRA	Mutual Recognition Arrangement
MTC	Maritime Training Council
NATCAC	National TVET Competency Assessment and Certification
NC	National Certificate
NCR	National Capital Region
NEDA	National Economic and Development Authority
NGO	Non-Government Organization
NTESDP	National Technical Education and Skills Development Plan
NTR	No Training Regulation
OFW	Overseas Filipino Worker
OJT	On-the-Job Training
PDC	Provincial Development Council
PDP	Philippine Development Plan
PESFA	Private Education Student Financial Assistance
PESO	Public Employment Service Office
PNQF	Philippine National Qualifications Framework
POEA	Philippine Overseas Employment Administration
PPP	Public-Private Partnership
PSA	Priority Sector Activities
PTESDC	Provincial Technical Education and Skills Development Committee
PTESDP	Provincial Technical Education and Skills Development Plan
PTQCS	Philippine TVET Qualification and Certification System
PTQF	Philippine TVET Qualifications Framework
PTTQF	Philippine TVET Trainers Qualifications Framework
QMS	Quality Management System
RDC	Regional Development Council
ROEIB	Regional Office Efficiency and Integrity Board
RTA	Regional Trade Agreement
RTESDC	Regional Technical Education and Skills Development Committee
RTESDP	Regional Technical Education and Skills Development Plan
STCW	Standards of Training, Certification and Watchkeeping
TDF	TESDA Development Fund
TESD	Technical Education and Skills Development
TESDC	Technical Education and Skills Development Committee
TESDA	Technical Education and Skills Development Authority
TR	Training Regulation
TSDO	TVET Systems Development Office
TTIs	TESDA Technology Institutions
TVET	Technical Vocational Education and Training
TVI	Technical Vocational Institution
TWSP	Training for Work Scholarship Program
ULI	Unified Learner Identifier
UNESCO	United Nations Educational, Scientific and Cultural Organization
UTPRAS	Unified TVET Program Registration and Accreditation System
WFP	Work and Financial Plan
WTR	With Training Regulations
YP4SC	Youth Profiling for Starring Career

Chapter 1

Introduction

Education is fundamental to the realization of inclusive growth. As it begets knowledge and culture, education finds its practical articulation and demonstration in the world of work. Thus, knowledge, as it is inextricably embedded with people replete with ideas and bursting with entrepreneurial spirits, is valued as the key strategic resource to achieving growth objectives.

President Aquino's "**Social Contract with the Filipino People**" essentially reflects this unequivocal commitment to education and expresses the transformation objective as: *"From relegating education to just one of many concerns , to making education the central strategy for investing in our people, reducing poverty and building national competitiveness."*

Commitment to education acknowledges the different pathways toward acquiring knowledge, of which technical vocational education and training, as a path when taken in conjunction with other education and training pathways, is recognized to be one primary knowledge building block.

The National Technical Education and Skills Development Plan (NTESDP) 2011 – 2016

The NTESDP 2011-2016 headlines the pivotal contribution of technical vocational education and training to the national goals of inclusive growth and poverty reduction in the medium-term. The NTESDP therefore, as formulated, serves the following purposes:

- It outlines the major directions, including specific strategies, policies and programs for technical vocational education and training; and
- It serves as a guide for the multifarious TVET players so that coherence and alignments in its implementation are advanced.

Plan processes

The NTESDP formulation is informed by the following national frameworks, viz.:

- The **Philippine Development Plan** , 2011-2016 that recognizes workers' skills and competencies are at the core of improving employment outcomes and increasing productivity and growth;
- The **Labor and Employment Plan**, 2011-2016 that recognizes labor not only as beneficiaries of growth but also creators of growth; and

The **1st cycle NTESDP** , 1999-2004 and the **2nd cycle NTESDP** 2005-2009, gains and lessons from said cycles of which were instructive in framing the new cycle directions. **Sub-National Plans** to be informed by the NTESDP that are area-based, sector specific and labor- market directed include the following, viz.:

- **Provincial Technical Education and Skills Development Plans (PTESDPs)**, totaling 85 (for 79 provinces and 6 NCR district offices); and
- **Regional Technical Education and Skills Development Plans (RTESDPs)**, totaling 17 and essentially a consolidation of the PTESDPs.

Both national and sub-national plans are accompanied by **Work and Financial Plans** (WFPs) that contain output and resource input requirements. Further, a **Monitoring and Evaluation Framework** is derived to measure performance as indicated in the plans.

For legitimacy purposes, both national and sub-national plans undergo an **approval process**, viz.:

- At the national level, the NTESDP is endorsed by the NEDA Board
- At the sub-national level , the RTESDPs is endorsed by the Regional Development Councils (RDCs)

An intensive and extensive **consultative process** characterizes all stages of the planning cycle. The plans therefore reflect the collective vision of all stakeholders on technical vocational education and training particularly on how its developmental contributions can be advanced in the next six years.

Report structure

The report is structured as follows:

- Chapter 1, as the introductory portion of the Plan document, explains the purpose of the plan and its bases, describes the plan formulation process and outlines the plan report structure.
- Chapter 2 discusses TVET's contribution relative to the whole education and training system and highlights the critical role of TESDA as oversight agency for TVET.
- Chapter 3 raises TVET issues and challenges as it seeks to anticipate the changing dynamics of the labor market it serves.
- Chapter 4 presents TVET strategic directions for the medium term as it addresses issues of access, equity, quality and relevance.
- Chapter 5 defines the implementation frameworks of the plan and articulates how it will be brought to fruition.

Chapter 2

TVET: Overview & Perspective

Philippine education and training system

The management of the Philippine Education and Training System is tri-focalized and described as follows:

	System	No of Years	Accountable Agency
Basic Education	Kindergarten	K	Department of Education
	Elementary	6	
	Secondary	4	
		2	
Middle Level Education	Post-Secondary, Technical-vocational, Qualifications-based Non-degree		Technical Education and Skills Development Authority
Higher Education	Baccalaureate degree, graduate and post graduate programs.		Commission on Higher Education

Note: the K to 12 programs are major reform areas currently in process

Trifocalized Management in the Philippine Education and Training System

Basic education managed by **Department of Education** (DepEd) focuses on the delivery of foundational competencies to prepare persons for higher learning. Currently, it covers 6 years of elementary education and 4 years of secondary education. Major reforms in this sector through the introduction of the K to 12 program - that is, increasing the number of years of basic education from 10 to 12 and making Kindergarten mandatory – is underway .

Middle level education managed by the **Technical Education and Skills Development Authority** (TESDA) focuses on post-secondary technical-vocational education and training for middle-level learners. These learners as defined in RA 7796 refer to the following: (1) those who have acquired practical skills and knowledge through formal and non-formal education and training equivalent to at least a secondary education; or (2) skilled workers who have become highly competent in their trade or craft as attested by industry. All middle-level learners go through a certification

process as promulgated in the **Philippine TVET Quality Framework (PTQF)** to evince competency.

TVET provision is delivered through a network of public and private institutions through the following modes:

- School-Based – refer to the direct delivery or provision of TVET programs by the public and private providers, including the TESDA-administered schools;
- Center-Based – refer to the delivery of training programs by the TESDA Regional, Provincial and Specialized Training Centers as well as private training centers;
- Enterprise-Based – are training programs implemented within companies/ firms; and
- Community-Based – training delivery conducted at the local/ community level, mostly in partnership with the local government units (LGUs) and the non-government organizations (NGOs).

Higher education managed by the **Commission on Higher Education (CHED)** focuses on baccalaureate degrees, graduate and post graduate programs and offerings toward developing professionals and high-level manpower.

To foster innovation and responsiveness in the whole education and training system, the development of a **Philippine National Qualifications Framework (PNQF)** is in process. A practicable system of credit transfers, the PNQF, when adopted and implemented, will allow seamless transitions between and among the three systems.

TVET system management

As TVET Authority, TESDA is mandated, as per RA 7796 to provide “relevant, accessible, high quality and efficient technical education and skills development in support of the development of high quality Filipino middle-level manpower responsive to and in accordance with Philippine development goals and priorities.”

Pursuant to its mandate, TESDA exercises its leadership role in TVET in the areas of providing the overall policies and direction, developing systems and setting standards, supporting TVET provision and building the capacity and capability of TESDA and its partners in delivering relevant TVET programs.

The TVET system is characterized by the active participation of the private sector as the direct participant and immediate beneficiary of trained and skilled workforce, as well as the local government units, the labor sector and other stakeholders, in the provision of technical education and skills development opportunities.

TVET system elements

The TVET system is to be measured for internal efficiencies, effectiveness and external efficiencies. Internal efficiencies refer to how well resource inputs are used to produce outputs. Effectiveness refer to the extent outputs are able to achieve the desired outcomes. External efficiencies refer to market results relative to outcomes derived.

Indicator elements include adequacy, proportionality, access, equity, quality, relevance and responsiveness. These system elements are what TESDA as Authority in TVET seeks to achieve in positive ways as it directs and manages via its Direction Setting, Standards Setting and Systems Development and Support in the provision of TVET.

TVET System Elements

	Input	Output	Outcome	Impact
Indicator	Institutions operative Trainers trained Resources mobilized	Programs registered Training regulations promulgated Training seats available Curriculum exemplars developed Assessment tools developed Persons enrolled & graduated Persons assessed & certified Students assisted via scholarships	Certification Rate	Employment Rate
Indicator Elements	Adequacy Proportionality	Access Equity	Quality	Relevance Responsiveness
Indicator Typology	Internal Efficiency	Effectiveness		External Efficiency
	S U P P L Y			D E M A N D

TVET system performance

NTESDP 1999-2004, 1st cycle

“A Vision and Strategy for the Development of Middle-Level Manpower”

Major Performance

In terms of **access**, an increasing trend in TVET enrolment and number of graduates was noted for the period 2000-2004. This is attributed to the expanding capacity in TVET provision as manifested in the increased number of TVET providers from 1,768 in 2000 to 4,510 in 2004.

In terms of **relevance**, the responsiveness of TVET programs can be measured in terms of employment and skills utilization rates of TVET graduates. The graduate tracer

studies conducted in 2000 and 2004 showed an average employment rate of 60% and an average skills utilization rate of 67% among TVET graduates surveyed a year after completing the course.

In terms of **quality**, the TVET reforms initiated in 1998, specifically the installation of a quality-assured Philippine TESD system, were directed towards ensuring quality in TVET programs and outputs. These include the mandatory registration of all TVET programs/course offerings in accordance with the standards set. The competency assessment and certification system was likewise strengthened to provide a more efficient system of assessing the competencies of workers and TVET graduates.

In terms of **equity**, TESDA implemented scholarship and other student financial assistance programs such as the PESFA.

NTESDP 2005-2009 2nd Cycle **“Global Competencies and Global Opportunities”**

Major Performance

On **improved access and equity** in TVET, opportunities were made available to all clients including special clientele groups as women, differently-abled persons, and indigenous people. Relevant and timely information on training opportunities were made available to prospective beneficiaries. From 2005-2009 total enrolment reached 9,561,227 with its highest peak at 2,142,414 in 2007. Graduates on the other hand, totaled 7,913,581 which are 82.77% of total enrolled. Average increase of graduates for the period 2006-2009 was registered at 13.72%. The increase in enrolment and graduates in 2006-2009, was the result of the massive scholarship programs offered by the government which provide free training, training support fund and free competency assessment to support job creation and preservation.

To provide greater access to TVET, scholarship and student assistance programs were provided to deserving TVET enrollees in all regions in the country. This is made available through the Private Education Students Financial Assistance Program (PESFA) and the Training for Work Scholarship Program (TWSP). PESFA annual budget allocation is PhP 200 million.

The TWSP, a program launched in May 2006, was in response to the clamor of industry to address the critical skills shortages in priority sectors, particularly in Business Process Outsourcing, metals and engineering, construction and tourism among others. It also served as the training component of the Government’s Economic Resiliency Plan (ERP) in response to the Global Financial Crisis in 2008. For the period 2006-2009, a total of PhP 8.07 billion has been provided for the TWSP. Graduates/Scholars for the period reached 976,191.

On **improved assessment and certification**, there was an increase in the number of TVET graduates with verified/validated competence to perform a particular skill

according to quality standards defined by industry. Moreover the registry of certified job-ready TVET graduates is readily available to prospective employers, both for local and overseas employment. For the period 2005-2009 a total of 2,268,978 assessed persons and 1,684,844 certified persons were recorded and resulted to 74.25% certification rate. The policy on mandatory assessment of TVET graduates in programs with training regulations was implemented and adopted in 2005.

On **enhanced employability** of TVET graduates, TVET graduates have greater access to domestic and overseas employment or have improved prospect for entrepreneurial and self-employment. In the 2008 Impact Evaluation Study, the overall employment rate of TVET graduates in the labor force or who actively search for work registered at 55.1%.

Indicators of performance, 2005-2010

On internal efficiencies

TVET institutions operative

Private	Public
3,906	422
90.25%	9.75%

Table 1.0 TVET Institutions, as of December 2010

TVET provision in the country is delivered by the network of public and private institutions. As of December 2010, there were 4,328 TVET providers of TESDA-registered programs. The private TVET institutions dominate the training landscape with 3,906 (90.25%) while the public sector registered 422 (9.75%).

TVET trainers trained

Private	Public	Total
15,912	7,564	23,476
67.78%	32.22%	100.00%

Table 2.0 TVET Trainers Trained, 2006-2010

For the period 2006-2010, a total of 23,476 TVET trainers have been qualified and certified in various qualifications. These certified trainers are predominantly from private TVET institutions with 15,912 (67.78%) of the total while those from the public registered at 7,564 (32.22%).

TVET resources mobilized

Private Funds	Public Funds
53.5%	46.5%

Table 3.0 TVET Financing Sources, 2006-2010

TVET financing comes from two major sources, private and public funds with private funds contributing more than public funds in financing TVET initiatives by providing 53.5 percent of the total resource base.

On public funds, different government agencies contribute to TVET initiatives and include the following:

- TESDA that funds a network of 125 TESDA Technology Institutes (TTIs) nationwide and assumes the authority role and the supervision of the whole TVET sector.
- Local government units (LGUs) that fund and organize short duration TVET courses.
- Other government departments namely : Department of Interior and Local Government (DILG), Department of Agriculture (DA), Department of Trade and Industry (DTI) and Department of Social Welfare and Development (DSWD).
- Legislators contribution through the I-CARE

Funds	2008	2009	2010	TOTAL	%
General Appropriations Act (GAA)	3,165,238	2,030,879	2,107,416	7,303,533.00	0.73
Grants and Aids	102,600,199	4,390,441	13,382,027	120,372,667.00	12.09
TESDA Development Fund*	62,261,662	75,278,106	54,229,687	191,769,455.00	19.27
Income Generating Projects	26,100,828	99,001,391	54,011,745	179,113,964.00	18.00
Sariling Sikap Program					
I-CARE	257,030,000	137,870,000	101,875,000	496,775,000.00	49.91
TOTAL	451,157,927	318,570,817	225,605,875	995,334,619.00	100.00
<ul style="list-style-type: none"> • <i>(*) contribution due from the provision of the law, RA7796, Sec. 31</i> • <i>Source: Budget Division, TESDA</i> 					

Table 4.0 TESDA Fund Sources, 2008-2010

TESDA funds come from different sources which for the period 2008 to 2010, generated funds that reached up to Ph P995, 334,619 million. Half (50%) of the total funds for the three-year period were sourced from I-CARE and only 0.73% came from GAA.

On the other hand, private funds for TVET financing come from three major groups, viz.:

- Trainees who pay fees as their contribution that amounts to 28.6% percent of the total expenditure and represents 1.5 times than the budget allocated by TESDA
- Companies who fund apprenticeship and learnership programs and short courses as well or give allowances to DTS students
- NGOs who run short courses including foundations that help training institutions

On effectiveness

TVET programs registered

WTR	NTR	TOTAL
16,966.00	3,079.00	20,045.00
84.64%	15.36%	100.00%

Table 5.0 TVET Registered Programs, as of December 2010

As of December 2010, there were 20,045 TVET programs registered. Of the total programs registered 84.64% were with training regulations and 15.36% were without training regulations. The National Capital Region (NCR) has the most number of registered programs with 4,975 (25%) while ARMM has the least with only 166 (1%).

Training regulations promulgated

The TESDA Board promulgates Training Regulations (TRs) by which TVET programs offered to the public are qualified and registered. To date, a total of 224 training regulations for 20 priority sectors have been developed and promulgated by the TESDA Board. The most number of TRs belong to the Construction sector with 45 (20.01%), followed by Automotive Sector with 34 (15.18%) and the Health, Social & Other Community Development Services with 29 (12.95%) respectively. In support of promulgated Training Regulations, TESDA has developed competency-based curriculum **exemplars** and **assessment tools**.

TVET training seats available

TTIs	TVIs	TOTAL
189,840	1,407,060	1,596,900
11.89%	88.11%	100.00%

Source: TESDA, TSDO

Table 6.0 TVET Capacity, as of December 2010

As of December 2010, there were a total of 1,596,900 training seats for programs across all TVET institutions that were registered with TESDA. Of the total, NCR is deemed to have the highest absorptive capacity having 22.73% of the total training seats. ARMM has the lowest absorptive capacity having only 0.85% of the total training seats.

Persons enrolled, graduated, assessed and certified

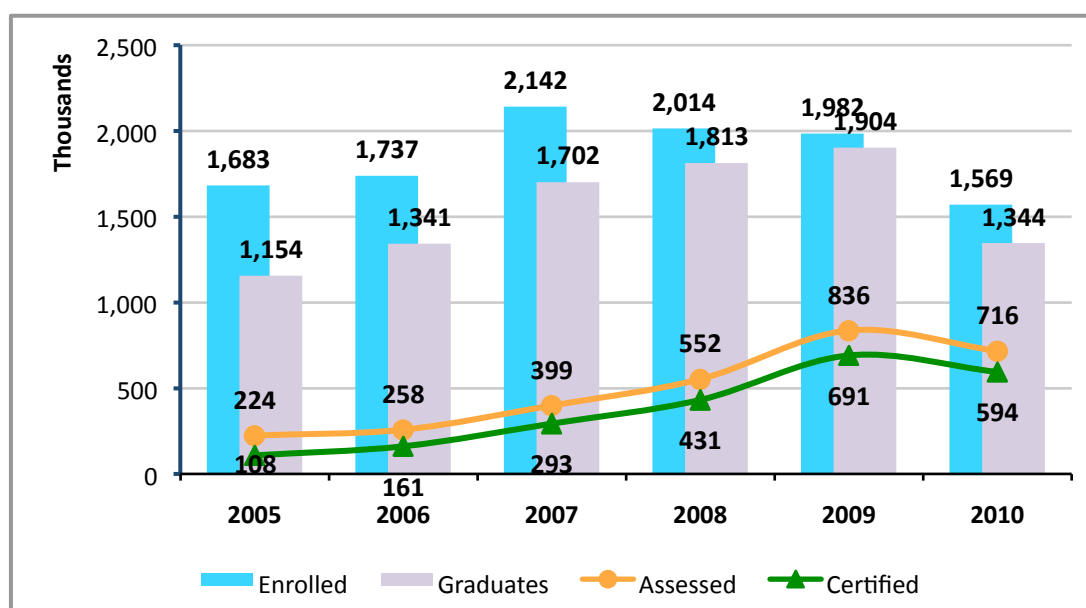


Diagram 1.0 Enrolment, Graduates, Assessed and Certified, 2005-2010

Persons enrolled. From 2005-2010, total enrolment reached 11,127,633 with its highest peak at 2,142,414 in 2007. Enrollment increased from 2005-2007, however, it decreased from 2008 to 2010. Average annual enrolment is 1,854,605.

Persons graduated. Graduates on the other hand, totaled 9,257,952 for the same period. This represents a completion rate of 83.20%. The lowest number of graduates was posted in 2005 at 1,154,333 and the highest at 1,903,793 in 2009. Average annual number of graduates is 1,542,992 for the period. Highest percentage increase of graduates was noted in 2007 at 26.98%. Average increase of graduates for the period 2006-2009 was registered at 13.72%. In 2010, the total number of graduates decreased by 29.38% from 2009. The decrease in enrolment and graduates from 2009 to 2010 is largely attributed to the substantial decrease in the funding allocation for the Training for Work Scholarship Program (TWSP) in 2010.

Certification rates. From 2005 to 2010, a total of 2,985,198 persons were assessed and 2,279,167 were certified resulting to an average of **76.35%** certification rate. Lowest certification rates were shown in 2005 and 2006 at 48.38% and 62.43%, respectively. The highest certification rates were in 2009 (82.62%) and 2010 (82.40%). It is noteworthy to mention, that the policy on mandatory assessment of TVET graduates in programs with training regulations was implemented and adopted in 2005. Although certification rates continue to increase, there is still a need to promote the value of certification and recognition by the industry for hiring, promotion and wage determination.

Ladderized education program (LEP) institutionalized

LEP offerings. As of June 2010, there were 730 Institutions offering LEP in 1,330 ladderized degree programs containing 3,473 embedded tech-voc qualifications. There are 8 priority disciplines covered under LEP: Agriculture and Fisheries; Health and Medical Services; Information and Communications Technology; Maritime; Tourism/Hotel and Restaurant Management (HRM); Criminology; Teacher Education and Engineering.

The LEP is implemented under the framework of Executive Order No. 358 or the “Institutionalization of Ladderized Interface Between TVET and Higher Education” issued on 15 September 2004, that mandates TESDA and the CHED to develop and implement a unified national qualifications framework that establishes equivalency pathways and access ramps for a ladderized system that allows easier transitions and progressions between TVET and higher education.

Under the LEP, the tech-voc qualification in a degree program establishes job platforms and provides individuals opportunities to get jobs and earn incomes, and at the same time continue college education at their own pace and time.

Students assisted via scholarships

PESFA. For the period 2005 to 2010, a total of 106,601 students benefitted from the PESFA Scholarship program. Highest enrolment and graduates were registered in 2009 at 23,229 (21.79%) and 16,886 (18.58%) respectively. The PESFA scholarship program has an annual allocation of PhP200 million since its inception in 1997.

Year	Enrolment	Graduates
2005	13,944	13,944
2006	13,869	13,869
2007	16,856	16,856
2008	15,929	15,929
2009	23,229	16,886
2010	22,774	13,406
Total	106,601	90,890

Table 7.0 PESFA Enrolment and Graduates: 2005-2010

TWSP. For the period 2006 to 2010, total enrolment for the Training for Work Scholarship Program (TWSP) reached 1,249,014 while total graduates reached 1,043,550 (83.55%). Highest enrolment and graduates were posted in 2009 at 750,516 (60.09%) and 592,977 (56.82%) respectively. A decrease of 87.06% in the enrolment and 88.64% in graduates were noted from 2009-2010 mainly because of the decrease in budget for the TWSP.

Year	Enrolment	Graduates
2006-2007	222,698	215,418
2008	178,656	167,795
2009	750,516	592,977
2010	97,144	67,360
TOTAL	1,253,014	1,043,550

Table 8.0 TWSP Enrolment and Graduates: 2006-2010

LEP. LEP Scholarships have been provided through the TWSP. For the period 2006-2009 total enrollment registered at 112,718 while total graduates, registered at 98,840 (87.69%). Highest enrolment and graduates were noted in 2006-2007 as substantial allocation was given to aggressively promote the program.

Year	Enrolment	Graduates
2006-2007	93,085	86,753
2008	13,656	9,874
2009	5,977	2,213
TOTAL	112,718	98,840

Source: *Investing on Filipino Thru TVET-TESDA Report: July 2010*

Table 9.0 LEP Scholarships SY-2006-2009

On external efficiencies

Employment rates

The employment rate is measured by the number of graduates getting employed against the total graduates who actively search for jobs within a period of 6 months to one year. This is considered a measure of employability.

The 2008 Impact Evaluation Study (IES) showed that 55.1% of the TVET graduates in the labor force who acquired work-based competence find jobs within 1 month to one year after acquiring TVET qualification from the TVET system. This employment rate is lower than the 2005 IES results of 64.6%. The decline can be attributed to many reasons, to include: the effects of the global financial crisis which slowed down economic activities and resulted to job losses; skills mismatch between the requirements of the available jobs and the skills possessed by those seeking employment; and geographical mismatch between locations of job opening and job seekers.

Priority Sector	Employed	
Agriculture and Fishery	1,039	52.9
Automotive	8,398	56.0
Construction	6,135	61.8
Electronics	4,444	54.4
Footwear and Leather goods	66	100
Furniture and Fixtures	112	77.3
Garments	1,104	45.1
Health, Social and Other Community Development Services	20,666	47.3
Heating, Ventilation Airconditioning and Refrigeration	1,320	65.3
Information and Communications Technology	24,136	56.1
Land Transportation	915	77.4
Maritime	1,010	48.3
Metals and Engineering	7,549	60.8
Processed Food and Beverages	4,490	76.2
Tourism/Hotel and Restaurant	11,388	52.6
Others	4,681	64.2

Source: 2008 Impact Evaluation Study of TVET Programs

Table 10.0 Employed TVET Graduates by Priority Sector: Philippines: 2008

In terms of sector distribution of the employed TVET graduates, the survey shows that high employment rates of more than 50.0% are posted in the following sectors: footwear and leather goods (100.0%); land transportation (77.4%); processed food and beverages (76.2%); business processing outsourcing (56.1%), heating, ventilation, air conditioning and refrigeration (65.3%); metals and engineering (60.8%); construction (61.8%); and furniture and fixtures (77.3%). It is worth mentioning that these sectors are skills intensive. Further, sectors that were slightly below the national employment rate are the agriculture (52.9%), processed food (52.6%) and electronics (54.4%).

In terms of absolute number, information and communications technology posted the highest figures of employed graduates at 24,236 or employment rate of 56.1%; followed by health, social and other community development services at 20,666 or employment rate of 47.3% and tourism/hotel and restaurant at 11,388 or employment rate of 52.6%.

Chapter 3

The Planning Context

The Philippine economy is faced with serious challenges that threaten its capacity to remain productive and competitive. In the country's pursuit of growth, a major issue is skills related as dramatic alterations in work and work arrangements over the last decade were experienced.

The TVET system, being rapid, flexible, jobs-oriented and competency-based, is recognized to be responsive to market requirements. However, TVET is facing some challenges of its own as it delivers programs and services that align with and seek to anticipate the changing dynamics of the labor market it serves.

Evidences and inferences on market trends and their implications on quality, equity & access & innovation of TVET provision are enumerated as follows:



On quality issues

Internationalization of skills

The lifting of trade barriers caused by globalization trends brings tremendous challenges for TVET, as human resources like other resources would have to be “internationally” shared. Workers to remain competitive will have to be provided trainings that take into account current and future needs with spatial considerations.

Some ASEAN Mutual Recognition Arrangements initiatives to improve worker mobility where the Philippines has participated in include:

- ASEAN Mutual Recognition Arrangement on Engineering Services
- ASEAN MRA on Nursing Services
- ASEAN MRA on Medical Practitioners
- ASEAN MRA on Dental Practitioners
- ASEAN MRA FRAMEWORK on Accountancy
- ASEAN MRA on Surveying Qualifications
- ASEAN MRA on Architectural Services

The Philippines has also entered into bilateral agreements with other International Maritime Organization (IMO) members for the mutual recognition of seafarer documents such as certificates of proficiency for both officers and ratings and deck and engine officer licenses. To date, the Philippines has 46 bilateral agreements with other maritime countries.

Mutual Recognition of Skills Qualifications that will allow freer movement of skilled workers and professionals in the region is aggressively pursued by the education and training sector.

Skills supply dominance retention. About 30% of the world's merchant seafarers come from the Philippines making it the largest single supply nation to the world's merchant fleet. By 2016, the vision of the Philippine Maritime industry is to dominate the market by supplying 50% of the world's marine fleet from the current 30%.

However, the increasing demand for seafarers amid bustling business opportunities resulting to stiffer competition, prompted ship owners to source from other countries, particularly China and India that are actively upgrading their manning capabilities. Moreover, as two different government entities take charge of our seafarers – MARINA under DOTC for domestic seafarers and MTC under DOLE for international seafarers, there is a need to harmonize differing standards with STCW standards.

Skills training for seafarers will need to be fast-tracked to maintain Philippine dominance in the seafarers market. Also, domestic standards will need to be aligned with global standards to facilitate skills mobility. Education and training for seafarers should also provide for pathways and seamlessness to enable non-officers the opportunity to become officers.

Job and skill mismatch. Due to inadequate employment opportunities in the formal economy, limited labor market information and inadequate academic preparation, the mismatch between jobs and skills compounds the problem of high unemployment levels among the youth and educated.

Based on a survey of the Bureau of Labor and Employment Statistics (BLES), covering a period of January 2007 to January 2008, despite unemployment affecting more than two (2) million Filipinos, employers had difficulty filling up their vacancies because of shortage of applicants with the right competencies and qualifications for the job.

PDP “10” medium-term skill requirements. In the competitive industry and service sectors, the Philippine Development Plan (PDP) focused on “**improved productivity and efficiency**” as one of the strategic goals that will contribute to

achieving growth. Specifically, these include: (1) tourism; (2) business process outsourcing (BPO); (3) mining, (4) agribusiness/forest-based industries; (5) logistics; (6) shipbuilding; (7) housing; (8) electronics; (9) infrastructure; and (10) other high-potential industries. Employment opportunities are expected to be not being far off and the need for the provision of skills training along the identified industry priorities cannot be overemphasized.

Skilled workers migration. The ASEAN Framework Agreement on Services (AFAS) is aimed at substantially eliminating restrictions to trade in services among ASEAN countries in order to improve the efficiency and competitiveness of ASEAN services suppliers. The ASEAN Member States continue to work on further expanding the negotiations to cover all sectors and all modes of supply. The ASEAN Economic Community Blueprint adopted by the ASEAN Leaders at the 13th ASEAN Summit on 20 November 2007 in Singapore sets out concrete steps to be taken to achieve a free flow of services by 2015 with flexibility.

Also, the Asia-Pacific Economic Cooperation (APEC) aims to promote free trade and economic cooperation throughout the Asia-Pacific region. It raises living standards and education levels through sustainable economic growth and fosters a sense of community and an appreciation of shared interests among Asia-Pacific countries. APEC considers prospects for a Free Trade Area of the Asia-Pacific (FTAAP) which would include all member economies of Asia-Pacific Economic Cooperation (APEC). APEC wants to achieve "free and open trade and investment" in the region.

These developments in the trade in services arena impact largely on TVET delivery as its programs will have to consider global requisites.

On equity and access issues

Skills training access for workers with special concerns

The Philippines has a large pool of unemployed and underemployed mostly in the 15-24 demographic. Of the total employed, one third are self-employed and doing unpaid forms of work.

Designing and segmenting TVET programs for precision and focus to meet the specific skills and learning needs of clientele deemed vulnerable – youth, women, disabled, rural workers – is imperative. Advocacy for increased public investments in TVET is likewise necessary.

Skills training in reintegration. Workers who have been displaced and repatriated due to the political unrests and other reasons face unemployment. With the instability in the sources of employment opportunities abroad, reintegration programs are a priority. TVET programs for migrants may be designed not only to help migrants but to allow migrant returnees to use the knowledge gained from

their work experience elsewhere be shared , codified and perhaps, if developed , can be a potential source of income.

Upskilling in the agricultural sectors

The agriculture sector is a key employment generator in the Philippines given its agricultural bounties: sugarcane, coconuts, rice, corn, bananas, cassavas, pineapples, mangoes; pork, eggs, beef and fish. Given the low productivity in this sector, TVET may need to adopt a more rural bias to reach this sector, considered remote and inaccessible and renew interest in agriculture as a potential jobs powerhouse given the new-found stream of interest in sustainable development.

Skills demand overseas vs. local demand. Migration for temporary work is progressively on the rise and getting diverse in terms of occupational categories. Women have also figured significantly in migration flows. Implications for TVET resources will figure significantly as tradeoffs as to focus resources on servicing local demand versus overseas demand may arise.

On innovation issues

Greening skills. The effects of climate change in work and workplaces cannot be overemphasized. In this regard, TVET faces two major challenges: (1) To “green” existing jobs to meet current demand for retrofitting and the re-tooling of industry to ensure that existing industries continue to grow; and (2) To train new workers with the appropriate green skills particularly for the renewable industries and emergent “green” technology sectors. Sectors identified with high demand for such “green” skills/jobs and with high environmental impact are the following: building and construction, energy, transport and agriculture.

TVET has a big role to play to support the government policy of protecting and caring for the environment. New competencies need to be developed relevant to this concern. Going into “green jobs” will require re-tooling of skilled workers on sectors with high environmental impacts. Relevant training regulations addressing these concerns will be promulgated. It is likewise essential to integrate principles, values and practices of sustainable development in the education and training curriculum.

Technology-biased skills

Advances in technology have brought about changes in skills structures demanded by industries. These new technologies such as the use of industrial robots for higher levels of productivity have had major impacts on the structure of employment and significant implications for human resource in terms of the nature, level, and quality of skills required.

Progress towards a more knowledge-based, service-directed and information-oriented markets call for a new type of skills training with a technology-bias to enable individuals and firms to participate in a workplace that has gone wired.

HOT (High Order Thinking) skills. With modernization and deregulation, particularly in the information technology industry, there will be a profound shift from low-level to high-level type of skills. These technological and organizational changes have a significant impact on the skills profile of workers in the production sector. Skills shall be one of the functions of the new economic order such that enterprises utilizing advanced technology and new organizational methods would require a different mix of skills.

Changes in skill composition are gearing towards the mental or problem solving type of skills rather than physical. Likewise, new competencies in industry as well as personal ones (such as teamwork and communication skills) will require a series of interventions over a period of time even after initial training.

Critical to the 21st century is not only technical competence but also creativity and innovation and adaptability to new technologies and opportunities. This necessitates the development of technical, cognitive and behavioral skills conducive to high productivity and flexibility in the work environment.

HOT Skills will be needed in preparing the 21st century Filipino skilled workforce. These skills include problem solving, critical thinking, innovation, being technological savvy, including communication and learning other people's languages. These have to be incorporated in the TVET curriculum, learning systems and approaches.

Chapter 4

Strategic Directions

Developing the 21st century skilled Filipino workforce

Faced with global and domestic challenges and a changing economic environment, and in response to the human resource development requirements of the PDP and the LEP, the National Technical Education and Skills Development Plan (NTESDP) for 2011-2016 envisions a 21st Century Skilled Filipino Workforce.

A 21st century Filipino skilled workforce as defined in this plan is characterized by the following:

- technically competent
- innovative and creative
- knowledge-based, with higher order thinking skills
- with foundational life skills
- in pursuit of lifelong learning opportunities
- possessing desirable work attitudes and behavior

These characteristics are essential if a nation's workforce is to be globally competitive and flexible. Moreover, these positive attributes are deemed to facilitate greater mobility across occupations or locations.

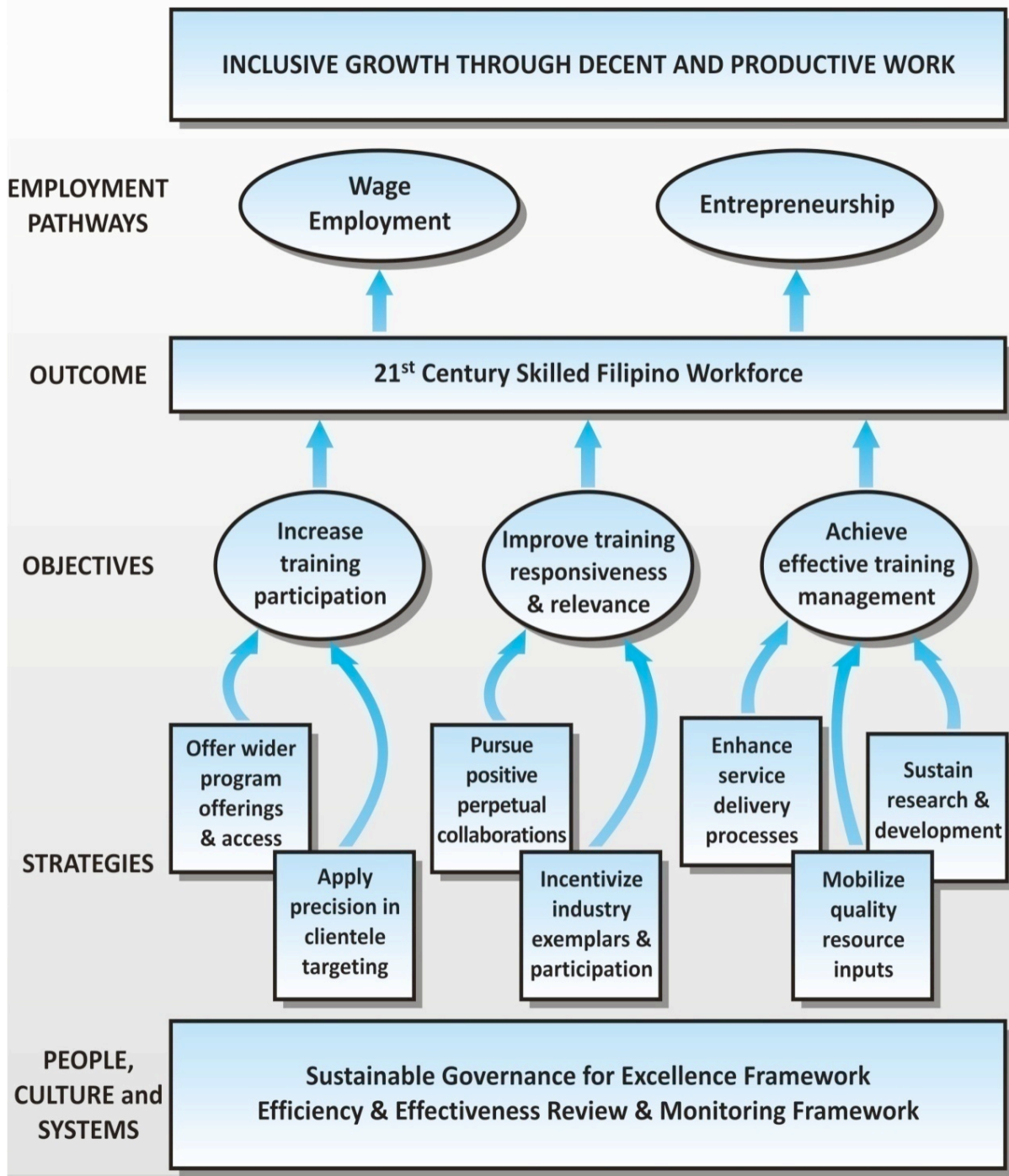
The plan period 2011 -2016 shall focus on preparing the skilled workforce for the 21st century. Major reforms shall be required in the systems, processes, infrastructure and governance of the entire education and training system, specifically on TVET. It will be an investment period towards achieving the desired objective.

Developing the 21st century Filipino skilled workforce is aimed at meeting the present and future skills requirements. It still essentially involves making our workforce more employable, productive and flexible to the changing requirements of industry and the labor markets, locally and overseas. This contributes to the improvement of the social and economic well-being of the society and in turn attaining inclusive growth and improvement in the quality of life. The possession of employable and productive skills has an equalizing and empowering effect and provides every Filipino a fair chance to access and benefit from the development gains.

Objectives and Enabling Strategies

The NTESDP articulates three major objectives that serve as anchors for the TVET strategies, policies and programs that will be rolled out during the plan period.

NTESDP Strategy Map 2011-2016



OBJECTIVE 1: To increase training participation

TVET covers a broad range of clientele which should be given the opportunities to acquire employable skills and become productive. Likewise, the skills requirements of industry and the labor markets have to be addressed. Quality and relevant skills development opportunities shall be continuously provided, particularly to the target clientele.

STRATEGIES

Apply precision in clientele targeting

1. **Develop a service delivery rationalization scheme.** Given the diversity and magnitude of TVET clients but with limited TVET resources, there is a need to properly segment the target clientele and prioritize. This shall be done through the following:
 - *Developing a more rigid and systematic policy and measures in the determination of TVET clients and priorities.*
 - *Mobilizing the inter-agency coordination group in the prioritization of clients and the rationalization and complementation of TVET programs and resources*

2. **Focus TVET interventions based on identified priorities.** Based on the segmentation of TVET clients and the financing for results principle, focus shall be given on the priorities to achieve the development objectives of the plan. These shall be pursued through the following
 - *Setting the minimum requirements for TVET consistent with the objectives of the plan and the qualification requirements for the job*
 - *Encouraging out-of-school-youth or those who have not completed high school to go back to school or avail of the alternative learning system (ALS) of DepEd to complete their basic education*
 - *Providing appropriate TVET interventions for the women, the marginalized and vulnerable sectors, particularly the unreached*

3. **Expand and promote agri-fishery related programs.** The agri-fishery sector, while a priority has become less attractive to young Filipinos and to entrepreneurs. There is a shortage of farm managers with adequate entrepreneurial skills. Few college students major in agribusiness. Yet education remains a great enabler for increased agribusiness activity. To do this, the following policy responses shall be adopted:
 - *Mobilizing the agri-fishery TESDA Technology Institutions to strengthen provision of agri-fishery programs using BEST PRACTICES as Business Enterprises to attract more students and their families (i.e. Family Farm Schools, Company partnership programs)*
 - *Redesigning agri-fishery programs to make them responsive and more beneficial and profitable to farmers and fisherfolks*
 - *Standardizing and improving the quality of training in the agri-fishery sector across regions and agencies*

Offer wider program offerings and access

4. **Enhance and intensify career advocacy, coaching and counseling in the TVIs.** To provide students and parents with good bases for career decision making, career profiling services shall be improved and expanded through the following:
 - *Providing capability building on career guidance and counseling to TVIs*
 - *Institutionalizing and maximizing the use of the Youth Profiling for Starring Career (YP4SC) or other equivalent assessment tests in career counseling and coaching*
 - *Coordinating and linking-up with other agencies, especially the DOLE in the provision of industry career guides*

5. **Expand and intensify employment facilitation services.** Making the employment facilitation services of the government as well as the privately-owned accessed facilities available to TVET clients is a key strategy to enhance employability. The following measures are supportive of this strategy.
 - *Institutionalizing and strengthening Blue-Desks in the TVIs, both public and private and TESDA operating units and providing technical assistance to TVIs to ensure the sustainability and effectiveness of their employment facilitation services*
 - *Strengthening linkages with other government agencies and private sector involved in employment facilitation (DOLE, POEA, etc.)*

6. **Sustain promotion and advocacy of TVET.** The strategic role of TVET in national development and the value of TVET as a viable career need to be continuously promoted. This shall be pursued through the following:
 - *Expanding aggressive social marketing in support of TVET through regular career guidance activities in high schools, and communities, and through client-specific information, education, and communication programs*
 - *Utilizing all forms of mass media and other means of communication such as the internet in the dissemination of information and in promotion and advocacy*
 - *Implementing innovative and creative skills competitions/olympics in partnership with industry, other government agencies and stakeholders*

OBJECTIVE 2: To improve training responsiveness and relevance

To keep training responsive and relevant, there must be closer linkage between the world of learning and the world of work. This will necessitate bringing together business and labor, government and training providers, at the local, industry and national levels to enhance the relevance of training to the changing needs of enterprises and labor markets.

STRATEGIES

Pursue positive perpetual collaborations

1. **Pursue Public Private Partnership in TVET.** Central to the expansion of TVET reach and capacity and improving relevance is the need to forge new alliances and strengthen existing partnerships with key stakeholders.

While TESDA has been working closely with the industry in the development of standards and systems that will align middle-level skills qualifications with the industry standards, TVET and industry linkages still need to be strengthened to capture other areas of cooperation and collaboration. This includes intensifying industry involvement in TVET development, financing, labor market information, standards setting, assessment and certification and other areas among others.

- *Focusing on innovation and value creation that moves the value chain rapidly so that clients expect service providers to be their partners in enhancing the value for the customers*
 - *Strengthening partnership with industry in all areas of TVET, from policy and planning, labor market information, standards development, training delivery, assessment and certification and financing*
2. **Expand enterprise-based training (EBT).** The enterprises are the best place where learning and acquisition of skills for higher technologies can take place. The same is true for competency assessment since the same requirements and standards apply. To implement this strategy, the following measures shall be pursued:
 - *Strengthening and promoting EBT schemes like dual training system (DTS), apprenticeship and learnership and on-the job training (OJT) as pre-employment modalities*
 - *Encouraging training in the workplace for skills upgrading, retooling and multi-skilling and other skills development interventions to improve productivity and promote lifelong learning*
 - *Pushing for the expansion of incentives for the private sector investing in TVET and making availment easier*
 - *Making available incentives such as scholarships (TWSP, PESFA) and other assistance for EBT participating industry and TVIs*
 - *Tapping the corporate social responsibility programs of industry/private sector for TVET*
 3. **Strengthen link-up with public and private employers in the hiring of TVET graduates.** Working with industry ensures best fit between jobs and skills required because industry experience, hands-on, knowledge and skills and proper work values and attitudes are best acquired in real workplace environment. Efforts shall also be directed towards encouraging more public and private employers to absorb TVET graduates in their organizations / agencies.
 - *Advocating for the recognition of OJTs as part of work experience required by industry*

- *Encouraging more local industry, LGUs and government agencies to recognize and accept certification for hiring purposes*

Incentivize industry exemplars and participation

4. **Provide incentives and rewards to generate wider industry support and commitment.** Mechanisms that give due recognition to industry's participation in TVET shall be put in place. Technical assistance and capability building interventions shall be provided to industry representatives to enable them to perform effectively. Measures on:
 - *Devising more creative and innovative incentives and rewards mechanisms that will encourage industry participation in TVET*
 - *Providing capability building interventions and technical assistance to industry to enable them to perform their role as TVET partner*
5. **Expand and purposively direct scholarships and other training assistance to critical and hard-to-find skills and higher technologies and use the program to incentivize the TVIs.**
 - *Working and soliciting support for the increase of PESFA and other scholarship budgetary allocation*
 - *Enhancing the distribution and selection criteria of scholarship programs through the involvement of key stakeholders such as industry and TVET associations*
 - *Prioritizing critical and hard-to-find skills needed by industry in scholarships and other government-supported skills development interventions*
 - *Improving program management and monitoring by involving the TESDCs and LGUs in the selection and distribution at the local levels*

OBJECTIVE 3: To achieve effective training management

The organization and management of the TVET system has great impact on efficiency and effectiveness of training provision. The necessary support systems, mechanisms, policies and resources must be in-place.

STRATEGIES

Enhance service delivery processes

1. **Increase and build up TVET capacity, both horizontally and vertically.** The expansion of TVET capacity horizontally or an increase in the training seats available is to anticipate the inflow of students of senior secondary students from K to 12 on the premise that DepEd shall adopt the policy of utilizing the public and private TVET institutions in the delivery of the TVET portion of the curriculum. The vertical expansion of TVET shall cover development and delivery of programs for more qualifications at higher levels of technologies and qualifications. The following measures shall be undertaken:

- *Requiring a massive TVET infrastructure build-up in the areas of trainers/assessors development; learning materials development; IT-linked programs, systems and processes*
 - *Expanding the development of Training Regulations in higher level qualifications and higher technologies*
 - *Mainstreaming NC I and NC II qualifications in Grade 9 to 12 (Specialization Phase)*
 - *Pursuing partnerships and co-management schemes among TESDA Technology Institutions (TTIs), private firms and industry associations*
2. **Institutionalize and strengthen coordination and convergence between and among government agencies concerned with skills development.** TVET capacity of other government agencies shall also be maximized through closer coordination and partnership arrangements. The responsibility of providing skills development opportunities is not confined to TESDA and the TVET institutions alone. Other government agencies have their respective mandates and responsibilities concerning the development of the capacities of their clients. To pursue this initiative, the following shall be implemented:
- *Ensuring regular and closer consultation and collaboration with the inter-agency group for the harmonization and complementation of programs and resources*
 - *Providing capability building interventions to the inter-agency members for the effective and efficient delivery of TVET program*
3. **Develop the capability of LGUs to ultimately assume the responsibility of providing community-based TVET opportunities.** TESDA shall continuously build-up the capability of the local government units, which has the main responsibility in the delivery of community-based skills development programs. This shall be pursued through the following:
- *Designing and developing capability-building programs for LGUs in establishing, managing and implementing TVET programs*
 - *Providing technical assistance to LGUs in the area of trainers development, curriculum and learning materials development, center administration and assessment and certification*
 - *Developing viable models and partnership arrangements for LGU-led TVET implementation in the localities*
 - *Mobilizing multi-stakeholder support and participation in community-based skills development programs*
4. **Strengthen the integrity of assessment and certification system and processes.** The acceptability and recognition of certification by the industry and other countries is influenced, to a great extent by the integrity of the systems and processes. Thus, it is imperative that the following policy responses are pursued:
- *Establishing /Setting- up sectoral or enterprise-based assessment directly managed and operated by the industry, with priority given to the maritime sector given the country's dominance in the global labor market*
 - *Promoting industry participation and building up their capabilities to undertake sectoral / enterprise-based assessment*

- *Pursuing the establishment of on-line assessment as applicable.*
 - *Implement continuing improvement in the assessment and certification system and processes*
5. **Improve and strengthen the monitoring TVET graduates.** Monitoring of TVET graduates as to their status of employment, including entrepreneurial activities, after completing TVET programs is a critical area of concern that need involvement and cooperation of various TVET stakeholders. To strengthen the monitoring system, the following measures shall be implemented:
- *Making the TVET institutions responsible and accountable for the tracking of their own graduates, particularly on their employment status*
 - *Implementing and institutionalizing the newly introduced Unified Learner Identifier (ULI) which aims to provide students with unique identifier that will facilitate tracking of their status from enrolment to employment at the institutional level*
 - *Continuing and regular improvement of the TESDA biennial TVET program evaluation*
 - *Expanding the coverage of monitoring to include follow-up on entrepreneurial activities of TVET graduates not the wage employment only.*
 - *Strengthening partnership and linkages with the LGUs, through the PESOs in the monitoring of the employability of the TVET graduates*
6. **Pursue the establishment of coordinative mechanism for the three (3) educational agencies.** The trifocalized management of the country's educational system necessitates the institutionalization of a coordinating body that will harmonize and coordinate the policies and programs for the education sector. At present, TVET is still struggling as the "dead end career" despite some efforts on the equivalency program and the Ladderized Education Program of the CHED and TESDA. There is no unified national system on recognized qualifications yet. TESDA has to pursue harder for the approval and the eventual adoption of the Philippine National Qualifications Framework (PNQF). Towards this end, the following measures shall be undertaken:
- *Working with DepEd and CHED and other concerned stakeholders for the institutionalization of the coordinating body for the entire education sector*
 - *Pursuing the approval and adoption of the Philippine National Qualifications Framework (PNQF) towards a unified, seamless and borderless education and training system*
 - *Addressing the need for the formulation of the coherent policy framework for ICT for education (ICT4E) or ICT integrated in the curriculum across levels, instructional materials and delivery platform is ICT-based, an assessment of digital literacy and 21st century skills, among others*
7. **Institutionalize Quality Management System (QMS) in TVET.** Quality training entails more investments towards quality TVET. Improvement in inputs in TVET provisions such as trainers/assessors, learning materials and curriculum, training facilities and infrastructure, among others, are essential. All of these should align with the requirements of industry to enhance the employability of TVET graduates.

Continuous improvement and maintaining the integrity in quality assurance systems and processes is a must.

The adoption of Quality Management System (QMS) in the TVET institutions as well as pursuing accreditation is necessary measures to raise the bar of education and training in the country. This necessitates improving the quality of all aspects of education and training – teachers / trainers/ faculty, curriculum, learning materials and resources, facilities and equipment – as well as management and governance. Benchmarking of programs and competencies with international standards and seeking international recognition needs to be pursued, including licensing and certification of competencies.

- *Pursuing certification under ISO or other internationally recognized certification bodies in TESDA and the TVIs.*
- *Conducting continuing capability building programs to promote quality and excellence in service delivery*
- *Improving the quality assurance processes in TVET such as program registration, assessment and certification, accreditation of institutions and other processes as part of the continuing improvement and to fortify the integrity of these systems and processes.*

8. **Strengthen TESDA as the Authority in TVET.** To effectively implement its mandate, TESDA, as the Authority in TVET, its organizational capacity and capability has to be aligned with the requirements of its clients / customers.

- *Pushing for the approval and implementation of the Rationalization Plan which has taken into consideration the changing environment and demands of operations, particularly at the frontlines*
- *Building-up the organizational capacity and capability of TESDA continuously in line with its mandate*
- *Implementing the resource allocative mandate of TESDA under the framework of inter-agency coordination*

Mobilize quality resource inputs

9. **Conduct periodic review of training regulations and curricula.** There will be regular or periodic reviews of nationally-promulgated training regulations (TRs) that have been in effect for three (3) years or more. The aim is to keep these up-to-date with the current demands and trends in both the local and international labor market including policy directions and legal imperatives along environment protection, consumer protection, and occupational health and safety, among others. Enhancement of the TRs shall also be pursued to align to the requirements of developing a 21st century skilled Filipino workforce. The following policy responses shall be adopted:

- *Reforming / Enhancing the Training Regulations (TRs) to deepen the theoretical/ knowledge component, employability skills, promoting the use of automation/ technology, power tools, strengthening safety and health and consideration of environmental / ecological concerns*

- *Ensuring the implementation of the mandatory review of TRs that have been in effect for three years or as necessary*
- *Reviewing and enhancing the curricula in consonance with the changes in the TR and to enhance TVET delivery along the competency-based paths*
- *Ensuring the integration of gender and development principles in the development of the TRs*

10. **Develop and qualify trainers for TVET based on the PTTQF.** The TVET trainer development program will be strengthened and expanded within the Philippine TVET Trainer Qualifications Framework through the following measures:

- *Prioritizing TVET infrastructure build-up especially trainers developing using available resources from the Training-for-Work-Scholarship Program (TWSP), regular funds and the TESDA Development Fund (TDF)*

11. **Implement models and pilot for new and higher technologies.** The TESDA Technology Institutions (TTIs) and other selected private TVIs shall be utilized for the modeling and piloting of training in new and higher technologies. The integration of ICT in TVET offers unprecedented opportunities for TVET system to expand its capacity and to enhance and facilitate interaction across geographic distance to achieve greater learning objectives. The development of new broadband communication services and convergence of telecommunication with computers have created numerous possibilities to use a variety of new technology tools for teaching and learning system. All these should be harnessed to make TVET more accessible and to improve the teaching and learning process. Specific measures include:

- *Developing models on IT-enabled blended programs and EBTs using PPP and LGU convergence strategies*
- *Reforming the TTIs as the backbone for new and higher technologies*
- *Setting-up / expanding specialized technology centers/programs and centers of excellence in collaboration with industry and external funding agencies through co-management and turnkey project arrangements along identified priority areas*

12. **Intensify implementation and promotion of assessment and certification.** Skills certification is an important quality assurance mechanism that recognizes and certifies an individual's skills and competencies to accomplish a certain set of tasks. It provides clear information on those skills and competencies, and on acceptable standards. Assessment and certification of the competencies of the middle-level workers through the Philippine TVET Qualification and Certification System (PTQCS) shall be pursued. Specifically, the following measures shall be implemented:

- *Institutionalizing the conduct of nationwide synchronized competency assessment (e.g. NATCAC) and provision of free assessment services*
- *Strengthening promotion and advocacy of assessment and certification, focusing on the prestige in the acquisition of a national certificate (NC) or certificate of competency (COC) that is nationally and internationally recognized to increase its recognition and acceptance by the workers, the industry and other TVET*

stakeholders and to give premium to the hiring of certified Filipino workers, as well as in wage determination, promotion and incentives

13. Pursue comparability and harmonization of skills and qualifications towards recognition arrangements. TESDA should start working towards mutual-recognition arrangements especially in countries where most of the Overseas Filipino Workers (OFWs) are employed. There is also the need to work out with labor receiving countries to allow the assessment of workers based on the host country's qualification standards. This strategy shall be pursued through the following:

- *Conducting benchmarking studies of competencies with international standards for purposes of comparability and harmonization.*
- *Collaborating with concerned agencies (DOLE, DTI and DFA) in pursuing bilateral MRAs*
- *Establishing partnerships with assessment institutions in other countries towards coming up with all possible forms of resource-sharing and bilateral recognition arrangements.*

14. Diversify sources of financing for TVET. Quality TVET provision, by its nature is expensive considering the cost of training equipment, tools, facilities and supplies and materials and the need for highly competent trainers. Increasing access and equity to TVET also requires funding. For TVET to be effective there is a need for adequate and sustainable financing. Measures for adequate and sustainable TVET financing shall include the following:

- *Pushing for the full implementation of the TESDA Law provision on TESDA Development Fund and the Levy Grant System*
- *Mobilizing support from the Legislators and the local government units to support TVET programs in their respective localities*
- *Increasing the involvement of the industry and private sector for TVET*
- *Developing priority programs and projects for the TVET sector for international/foreign funding, through loans and grants*

15. Develop and implement programs intended for green jobs. TVET shall support the skills requirements of "green-collar jobs". These are jobs that are supportive to the government's efforts on sustainable development, mitigating the ill effects of climate change and addressing the destructive effects of global warming in the country. This shall be pursued through the following:

- *Developing new Training Regulations or amend/review existing training regulations that are needed for green jobs and sustainable development, including agro-forestry*
- *Capability building of trainers and administrators to implement "green skills" programs*
- *Linking-up with local and international agencies in the design, implementation and monitoring of "green skills" programs*

Sustain research & development

16. **Intensify gathering, analysis and dissemination of labor market information (LMI).** The availability of relevant and timely labor market information particularly on skills and job demands is critical in making the TVET programs responsive to the requirements of industry. This strengthening of labor market information system shall be pursued through the following:

- *Ensuring closer, more active and purposive engagement with industry through regular consultation and dialogue with industry at the national and sub-national levels to identify in-demand skills and other skills development concerns*
- *Establishing partnership and closer linkage with government and the private sector for the generation and sharing of labor market information (e.g. DOLE, POEA, LGUs, PESOs, Job Search facilities, etc.)*
- *Ensuring the availability and accessibility of up-to-date labor market information to the TVET stakeholders through the use of technology (e.g. computer connectivity, use of social networking, etc.), the LGUs, and other means of communication*
- *Institutionalizing the publication of LMIRs and other related information*
- *Capacitating implementers in the area of data gathering and analysis*

17. **Strengthen research and development in TVET.** Continuing research and development on TVET and learning systems, new technologies, models and approaches need to be pursued. This shall involve the following measures:

- *Institutionalizing research and development in the TVET institutions and in TESDA*
- *Conducting capability building programs on research and development*
- *Networking, linking and partnering with local and foreign research and funding institutions*

Chapter 5

Implementing for Results

TESDA as the Authority in TVET seeks to guarantee positive outcomes through a thorough implementation of the objectives and strategies as laid out in the plan and adopts two frameworks by which will serve as its tools in the delivery of excellent service, viz.:

- Sustainable Governance for Excellence Framework
- Monitoring & Evaluation Framework

Sustainable governance for excellence framework

The TESDA Sustainable Governance for Excellence Framework is guided by three core principles: Transformational Leadership, Quality Management System, and Good Governance.



TESDA Sustainable Governance for Excellence Framework

Transformational leadership

Transformational leadership requires leaders who are innovative and sensitive to changes that exist within and beyond the TVET environment. The leadership must also be able to mobilize resources to bring about the necessary change desired to make TESDA more responsive and pro-active in providing the necessary programs and services that the various TVET clients need. Moreover, call for a more public-private-partnerships require leaders who possess the quality of being able to multiply influences, creating strong partnerships and convergence with different TVET stakeholders.

Policy responses towards achieving a transformational leadership in TESDA include:

- Implement moral recovery programs to develop morally-upright leaders and managers; and always upholding the Code of Conduct and Ethical Standards for Public Officials and Employees;
- Implement capability-building programs (supervisory training, public speaking, technical writing, character integrity building programs, coaching, mentoring, among others) for the supervisory and technical level managers;
- Regularly conduct performance management review and provide reward and recognition to the best performers;
- Undertake a purposive selection and hiring system to get the best and most suitable candidate to take over the place of senior leadership in TESDA.

Quality management system

As early as 2001, TESDA has embarked on its quality journey and has made significant steps and milestones. During the Plan period, TESDA shall continue its quality journey. In line with the government-wide quality management program under Executive Order No. 605 directing all departments and agencies of government to adopt ISO quality management system, TESDA's proactive stance is towards ISO 9001:2008 Certification.

Policy responses towards TESDA's quality journey:

- Strengthen TESDA's management of customer relationships through the installation of a more effective and efficient customer feedback mechanism that will measure customer satisfaction;
- Transform TESDA to become a more customer-focused organization by being able to define, understand and satisfy the individualized needs of its varied clients and improve the products and services that are provided to them.
- Provide an environment where quality journey is a shared commitment of everyone – managers and workers alike – where all activities are integrated toward improving performance at every level.
- Ensure that all TVET activities and related resources are managed using system and process approaches.

Good governance

Good governance will be the means that will drive TESDA to leadership excellence in TVET.

The support components to good governance include the following:

- **Goal Driven** - TESDA's goal of employability shall be the centerpiece of all TVET programs and initiatives.
- **Transparency** shall assure that there is no corruption within TESDA. Clear policies and strategies shall be communicated throughout the sector and shall be a means for promotion and advocacy.
TESDA shall ensure access to official records, documents and papers pertaining to official transactions and decisions. More importantly, audit report on training institutions shall be made known.
On-line services shall be made available in application for UTPRAS registration, application for competency assessment and issuance and validation of national certificates and certificate of competency.
There shall be transparent procurement procedures which will be uploaded in the website. The Bids and Awards Committee shall publish in newspapers and website invitations for bidding. Bidding shall be open to all to watch the proceedings. It should be noted that there shall be strict selection of the members of the Bids and Awards Committee. All forms that shall be used in all the procedures shall be downloadable.
- **Integrity Fortification** – At all times TESDA looks into the integrity of the organization. With the support of industry, there shall be integrity of the assessment and certification system and processes. To lessen human intervention, written tests shall be given on-line. The Internal Ombudsman in TESDA shall be strengthened so that corresponding punishment shall be enforced to those officials found guilty.
To give more value to the integrity of its organization, TESDA Order No. 99 series of 2011 created the TESDA Efficiency and Integrity Boards (EIBs). The establishment of the boards provides a structure and mechanism through enabling policies for developing programs that supports the government's call for responsibility, transparency, accountability and delivering TESDA's promise to its publics. The board has two components namely: The TESDA Central Office Efficiency and Integrity Boards (COEIB) and the TESDA Regional Office Efficiency and Integrity Board (ROEIB).
- **High Technology** shall be the core of TESDA training interventions. TESDA shall adjust to high technology and implement better systems. It shall increase capacity of information technology so information shall be released as real time information.
The TESDA Technology Institutions (TTIs) shall be reformed to adapt to the fast changing technology. There shall be investment in state of the art equipment. Its training shall be made more entrepreneurial.
- **Proactive and flexible.** TESDA as an institution should be proactive and flexible in any impending change. It should continuously strengthen its partnership with the industry and training providers to generate signals on labor market changes for

hard to fill and emerging jobs that will result in the development of new policies and standards.

TESDA must actively capacitate and involve the Technical Education and Skills Development Committees on policy analysis and formulation. A set of revitalized TESDCs can provide regular updates and inputs to the TESDA Board. A functional TESDC can be a strong linkage to the regional and local development councils where they can engage in resource allocation and mobilization, among others.

- **Strategic Alliance** – TESDA shall build strategic alliances with its partners and stakeholders through relational capital and political capital.

Relational capital is the sum of all of the relationships of all people within an organization. It builds more on business arrangements and forges a business like arrangement with partners towards a better move to the 21st century.

To attain relational capital, TESDA positions itself internationally through linkages and networking through international fora and conferences such as BIMP-EAGA, APEC, ASEAN, ASEM, JPEPA, UNESCO, ILO, Regional Trade Agreements/Free Trade Agreements (RTAs/FTAs) such as ASEAN-China, ASEAN-Korea, ASEAN-Japan, ASEAN-India, ASEAN-Australia-New Zealand, ASEAN-EU, among others. It shall work for mutually beneficial arrangements with other countries where bilateral arrangements on technical cooperation are available to allow for comparability, harmonization and benchmarking of the country's standards against the standards of other countries

To gain political capital, TESDA shall create a favorable image with the TVET sector and among its stakeholders such as LGUs and other government agencies.

- **Values Culture/Ethical Standards**

Following the Civil Service code of conduct and ethics for public officials, the TESDA organization shall at all times be accountable to the sector and shall discharge their duties with utmost responsibility, integrity and competence. TESDA inculcates positive values within its ranks and officials in reaching excellent organization. It shall employ transparency in the systems. There shall be accountability among the ranks and officials in disposing its duties and responsibilities and shall institute integrity measures.

- **Accountability**

TESDA shall act to correct those who do not conform to regulation and those not complying with standards. A consequence management system shall be implemented wherein penalties shall be given to those who does not conform and comply and motivate and incentivize those who conforms and comply.

TESDA shall be responsive civil servants and shall implement the "Reward for Work, Work for Reward Program". This shall be aimed at excellence, innovation, quality, and management practices for the organization.

To make sustainable governance happen, the Rationalization Plan shall be pursued. This Plan aimed to provide for a structure and a manning that will ensure high quality provision of services to its wide array of clientele. TESDA also moved for the strengthening of its core functions and widened its geographic coverage through the consolidation of resources and optimizing outcomes of TESDA offices and institutions.

Monitoring and evaluation framework

Efficiency and Effectiveness Review (EER) Approach to Monitoring. The EER approach to monitoring shall be utilized in monitoring plan achievements. The EER framework focuses on three basic principles:

Principles	Basic Questions to be Responded
RESPONSIVENESS /Appropriateness of plan interventions relative to the goals and targets	Are the programs, projects and activities deemed appropriate or should they be abolished, changed or reprioritized?
EFFECTIVENESS to achieve the desired outcome	Will the outputs of the programs, projects and activities able to achieve the desired outcomes?
EFFICIENCY having the best value for plan investments	Are the programs, projects and activities producing the outputs at competitive cost?

The framework provides a process of reviewing and classifying the Priority Sector Activities (PSAs) and Programs, Activities, Projects (PAPs) as regards their appropriateness and effectiveness in attaining the desired objectives. The approach is aimed at achieving an efficient system of resource allocation and public expenditure management by aligning fiscal and material resources to priority programs and services that effectively contribute to the attainment of the plan goals and objectives. These criteria will prove useful in the annual review for prioritizing programs and projects especially in designing the catch-up plan towards the achievement of the desired results.

Performance metrics .The success of the plan shall be measured through specific performance indicators. For the plan period, two (2) major indicators will be monitored which are as follows:

Certification Rate. A good quality assurance measure is the certification rate being registered by those who have undergone the assessment and certification process in various qualification levels. The performance of the takers in the competency assessment and certification is a reflection of the quality of TVET programs being offered. Thus, the results could serve as basis in reviewing the curriculum, capability building of trainers, facilities and equipment and even training methodology and materials.

Employability of TVET graduates is a good measure of TVET performance as whether or not the TVET programs are in line with the requirements of the job market.

Areas	Efficiency		Access
	Internal	External	
Accountability	Targets vs. Budget Resource allocation and management Prioritization	Review of TVET investments of other agencies per Sec. 25 of RA 7796 re: coordination function of TESDA	No. of graduates No. of PESFA slots No. of TWSP slots No. of certified workers Segmentation of clients Training cost
Performance Regulation	Standards Development Training Regulations Development Program Registration and Accreditation Accreditation of Assessment Centers/ Venues Accreditation of Trainers/ Assessors	No. of persons assessed and certified	Compliance Audit Continual improvement Quality Management System Reporting System
Value Contributions		Labor Market Information (Best-Job-Fit) Employability	

Table 11. Performance Indicators

Researches as a complementary evaluation mechanism. Researches, by providing deeper insights and more expansive perspectives, shall continue to be undertaken, to complement plan monitoring and evaluation efforts, the initial listings of which include as follows:

Impact Evaluation Studies. A feedback mechanism on the status of implementation of major TVET policies and programs done on a biennial basis, the studies focuses on establishing the employability of TVET graduates including related information as to their types of employment and incomes.

Employer Satisfaction Survey. Pilot-tested in 2008, the survey is to be institutionalized to elicit regular feedback from industries and employers on TVET graduates' performance in the workplace.

Study on the Effects of K to 12 Implementation to TVET. K to 12 implementation will be studied as it affects TVET's strategic positioning in the education and training market.

Study on Good Practices of TTIs and the APACC-accredited Institutions. Good Practices of TESDA Technology Institutions (TTIs) and the APACC-accredited Institutions in terms of methodology, training materials, trainers, hardware, software shall be documented to serve as models for other institutions to emulate. The study results would also serve as basis to develop awards and incentives mechanisms to TVET providers.

Acceptability of Assessment and Certification by the Employers and Industry. The study ensures that TVET assessment and certification remains current and aligned with industry hiring, training and promotion practices relative to TVET occupations. This is to guarantee industry's continued patronage of certificated TVET graduates.

Comparability of TRs with ASEAN Neighbors and the APEC Region. Building on the gains of the joint Philippine-China project on the comparability/ benchmarking of TVET qualifications in welding occupations, the idea is to expand it to include other occupations.

In sum, the pursuit of inclusive growth in TVET through the 3rd Cycle NTESDP, 2011-2016 will involve the following:

- **Institutions that unite** – there is a common thread or objective that unify various institutions and players in the TVET sector;
- **Infrastructures that connect** – the systems, processes, resources and people for TVET to work effectively are present and continuously developing and improving; **and**
- **Interventions that target** – the need for focus is recognized given the scarcity of resources. Market segmentation and focus targeting is done along the identified priorities.

References

President Aquino's Social Contract with the Filipino People

Philippine Development Plan

Labor and Employment Plan

Inputs from the Filipino Association for Mariner's Employment (FAME)

Labor Market Intelligence Report – Maritime Industry

2008 Impact Evaluation of TVET Programs

2005 Impact Evaluation of TVET Programs

Current TVET Data and Related Statistics, 2005-2009

Investing on the Filipino thru TVET, TESDA Report, July 2010

Investing in TVET in the Philippines, UNESCO Study

NTESDP 1999-2004, 1st cycle

NTESDP 2005-2009, 2nd cycle

TESDA Annual Reports

TESDA Law

TESDA Order No. 99 series of 2011

Monitoring and Evaluation by Janet Shapiro

Monitoring and Evaluation for TVET-related interventions – DEUTSCHE
GESELLSCHAFT FUR INTERNATIONALE ZUSAMME_NARBEIT (GIZ) GMBLT

Planning Guidelines on the Formulation of Medium-Term Philippine Development Plan

Companion Documents

A. TVET Training Targets 2011-2016

B. TESDA Investment Requirements 2011-2016

A. Training Targets by Sector 2011-2016

TVET Training Targets

INDICATORS	2011	2012	2013	2014	2015	2016
Enrolment	1,100,000	1,210,000	1,331,000	1,464,000	1,610,510	1,771,560
Male	531,300	586,850	649,528	720,288	805,255	885,780
Female	568,700	623,150	681,472	743,712	805,255	885,780
Graduates	1,000,000	1,100,000	1,210,000	1,331,000	1,464,100	1,610,510
Male	494,000	545,600	602,580	664,169	732,050	805,255
Female	506,000	554,400	607,420	666,831	732,050	805,255
No. of Persons Assessed	600,000	660,000	726,000	798,600	878,460	966,306
No. of Persons Certified	510,000	564,300	624,360	690,789	764,260	845,518
Certification Rate (%)	85.0	85.5	86.0	86.5	87.0	87.5
Employment Rate (%)	60.8	60.8	60.8	60.8	60.8	60.8
PESFA	15,000	15,000	15,000	15,000	15,000	15,000
TWSP	70,000	70,000	200,000	200,000	200,000	200,000

TVET Training Targets 2011 - 2016

Sector	Graduates						Assessed						Certified					
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
Full Qualification	1,000,000	1,100,000	1,210,000	1,331,000	1,464,100	1,610,510	600,000	660,000	725,900	798,480	878,320	966,150	510,000	564,300	624,360	690,790	764,260	845,520
PHILIPPINES	22,146	24,350	26,850	29,310	32,478	36,360	13,320	14,870	16,138	17,726	19,516	21,460	11,870	12,650	13,567	14,530	15,537	16,583
Agriculture and Forestry	8,850	9,680	10,650	11,710	12,880	14,170	5,310	5,810	6,390	7,030	7,730	8,510	4,520	4,970	5,500	6,090	6,730	7,450
Animal Production	6,740	7,370	8,110	8,920	9,810	10,790	4,050	4,430	4,870	5,360	5,890	6,480	3,450	3,790	4,190	4,640	5,130	5,670
Aquaculture	1,280	1,430	1,570	1,730	1,900	2,090	770	860	950	1,040	1,140	1,260	660	740	820	900	1,000	1,110
Compost Making	610	660	730	800	880	970	370	400	440	480	530	590	320	350	380	420	470	520
Hydroponics	660	770	850	930	1,030	1,130	400	470	510	560	620	680	340	410	440	490	540	600
Integrated Pest Management	280	330	360	400	440	480	170	200	220	240	270	290	150	180	190	210	240	280
Slaughtering Operations	270	330	360	400	440	480	170	200	220	240	270	290	150	180	190	210	240	280
Other Agri-related Courses	3,180	3,520	3,870	4,260	4,690	5,150	1,910	2,120	2,330	2,560	2,820	3,090	1,630	1,820	2,010	2,220	2,460	2,710
New Emerging Technologies	270	300	330	360	400	440	170	180	200	220	240	270	150	160	180	200	210	240
Automotive	63,371	73,350	77,430	83,160	89,890	96,810	36,410	42,250	48,370	51,110	56,270	61,660	32,810	36,140	39,590	44,230	48,140	51,140
Automotive Servicing	53,590	58,960	64,860	71,340	78,480	86,320	32,160	35,380	38,920	42,810	47,090	51,800	27,340	30,250	33,480	37,040	40,970	45,330
Driving	9,020	9,900	10,890	11,980	13,180	14,500	5,420	5,940	6,540	7,190	7,910	8,700	4,610	5,080	5,630	6,220	6,890	7,620
Other Automotive-related Courses	590	660	730	800	880	970	360	400	440	480	530	590	310	350	380	420	470	520
New Emerging Technologies	770	870	950	1,040	1,150	1,260	470	530	570	630	690	760	400	460	500	550	610	670
Construction	74,940	82,370	88,590	95,690	103,590	112,590	46,590	52,490	58,630	63,990	70,590	77,460	38,690	43,440	48,580	54,190	59,280	64,940
Basic Bench Work	540	550	610	670	730	810	330	330	370	410	440	490	290	290	320	360	390	430
Carpentry	3,490	3,850	4,240	4,660	5,120	5,640	2,100	2,310	2,550	2,800	3,080	3,390	1,790	1,980	2,200	2,430	2,680	2,970
Construction Painting	710	770	850	930	1,030	1,130	430	470	510	560	620	680	370	410	440	490	540	600
Consumer Electronics Servicing	24,020	26,400	29,040	31,940	35,140	38,650	14,420	15,840	17,430	19,170	21,090	23,190	12,260	13,550	14,990	16,590	18,350	20,300
Electricity	20,630	22,660	24,930	27,420	30,160	33,180	12,380	13,600	14,960	16,460	18,100	19,910	10,530	11,630	12,870	14,240	15,750	17,430
Electromechanics	610	660	730	800	880	970	370	400	440	480	530	590	320	350	380	420	470	520
Heavy Equipment Operations	4,280	4,730	5,200	5,720	6,300	6,930	2,570	2,840	3,120	3,440	3,780	4,160	2,190	2,430	2,690	2,980	3,290	3,640
Hollow Block Making	660	770	850	930	1,030	1,130	410	470	510	560	620	680	350	410	440	490	540	600
House Painting	610	660	730	800	880	970	370	400	440	480	530	590	320	350	380	420	470	520
Industrial Motor Control	510	550	610	670	730	810	310	330	370	410	440	490	270	290	320	360	390	430
Industrial Pipe Fitting	530	550	610	670	730	810	320	330	370	410	440	490	280	290	320	360	390	430
Laybrick/block for surface	640	660	730	800	880	970	390	400	440	480	530	590	340	340	380	420	470	520
Maintenance Mechanic	520	550	610	670	730	810	320	330	370	410	440	490	280	290	320	360	390	430
Masonry	3,170	3,520	3,870	4,260	4,690	5,150	1,910	2,120	2,330	2,560	2,820	3,090	1,630	1,820	2,010	2,220	2,460	2,710
Pipefitting	3,810	4,180	4,600	5,060	5,560	6,120	2,290	2,510	2,760	3,040	3,340	3,680	1,950	2,150	2,380	2,630	2,910	3,220
Plumbing	5,910	6,490	7,140	7,850	8,640	9,500	3,550	3,900	4,290	4,710	5,190	5,700	3,020	3,340	3,690	4,080	4,520	4,990
Plywood Building	570	660	730	800	880	970	350	400	440	480	530	590	300	350	380	420	470	520
Scaffold Erection	590	660	730	800	880	970	360	400	440	480	530	590	310	350	380	420	470	520
Technical Drafting	520	550	610	670	730	810	320	330	370	410	440	490	280	290	320	360	390	430
Tile Setting	670	770	850	930	1,030	1,130	410	470	510	560	620	680	350	410	440	490	540	600
Other Construction-related Courses	990	1,100	1,210	1,330	1,460	1,610	600	660	730	800	880	970	510	570	630	700	770	850
New Emerging Technologies	900	1,020	1,110	1,220	1,340	1,480	540	620	670	740	810	890	460	540	580	650	710	780

Sector	Graduates												Assessed						Certified					
	Full Qualification						Assessed						Certified											
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016						
Crafting	1,070	11,950	13,113	14,479	13,609	17,459	6,350	7,233	7,233	8,059	8,178	10,333	4,250	4,740	3,270	6,760	8,309	7,959						
Bag Making	1,450	1,540	1,690	1,860	2,050	2,260	870	930	1,020	1,120	1,230	1,360												
Balloon Making	1,170	1,320	1,450	1,600	1,760	1,930	710	800	870	960	1,060	1,160												
Bead Works Making	1,690	1,880	2,060	2,260	2,490	2,740	1,020	1,130	1,240	1,360	1,500	1,650												
Flower Making	680	770	860	930	1,030	1,130	410	470	510	560	620	680												
Handicrafts	3,670	4,070	4,480	4,930	5,420	5,960	2,210	2,450	2,690	2,960	3,260	3,580												
Paper Recycling	220	220	240	270	290	320	140	140	150	170	180	200												
Photographic Screen Processing	490	550	610	670	730	810	300	330	370	410	440	490												
Photography	100	110	120	130	150	160	60	70	80	80	90	100												
Plastic Canvass Making	450	440	480	530	590	640	270	270	290	320	360	390												
Plastic Moulding	120	110	120	130	150	160	80	70	80	80	90	100												
Silk Screen Printing	80	110	120	130	150	160	50	70	80	80	90	100												
Other Creative-related Courses	620	660	730	800	880	970	380	400	440	480	530	590												
New Emerging Technologies	130	150	160	180	190	210	210	90	100	110	120	130												
Cellular Phone Servicing	1,120	1,210	1,330	1,460	1,610	1,770	680	730	800	880	970	1,070												
Audio-Video Products Servicing	70	110	120	130	150	160	50	70	80	80	90	100												
Other Electronics-related courses	270	330	360	400	440	480	170	200	220	240	270	290												
New Emerging Technologies	20	20	20	30	30	30	20	20	20	20	20	20												
Footwear & Leathergoods-related Courses	240	220	240	270	290	320	150	140	150	170	180	200												
Other Footwear and Leathergoods-related Courses	160	220	240	270	290	320	100	140	150	170	180	200												
New Emerging Technologies	10	10	10	10	10	10	10	10	10	10	10	10												
Furniture	8,250	8,250	8,113	7,990	8,290	8,590	3,650	3,950	4,150	4,350	4,550	4,750												
Furniture and Furnishings	540	550	610	670	730	810	330	330	370	410	440	490												
Manufacture Wood Patterns	6,950	7,700	8,470	9,320	10,250	11,270	4,170	4,620	5,090	5,600	6,150	6,770												
Other Furniture-related Courses	800	880	970	1,070	1,170	1,290	480	530	590	650	710	780												
New Emerging Technologies	100	110	120	140	150	170	60	70	80	90	90	110												
Advance Loom Weaving	11,950	12,150	13,150	13,950	14,750	15,250	5,150	5,350	5,750	6,150	6,550	7,150												
Basic Sewing and Sewing Machine Operation	90	110	120	130	150	160	60	70	80	80	90	100												
Bleaching of Indigenous Fibers	520	550	610	670	730	810	320	330	370	410	440	490												
Cloth Mender	80	110	120	130	150	160	50	70	80	80	90	100												
Draft and Cut Pattern of Mens' Casual Apparel	50	110	120	130	150	160	30	70	80	80	90	100												
Industrial Sewing Machine Operation	340	330	360	400	440	480	210	200	220	240	270	290												
Ladies Casual Apparel Cutting & Sewing	510	550	610	670	730	810	310	330	370	410	440	490												
Quilting/Sewing	70	110	120	130	150	160	50	70	80	80	90	100												
Spinning	360	440	480	530	590	640	220	270	290	320	360	390												
Tailoring/Dressmaking	8,370	9,240	10,160	11,180	12,300	13,530	5,030	5,550	6,100	6,710	7,380	8,120												
Other Garments-related Courses	890	990	1,090	1,200	1,320	1,450	540	600	660	720	800	870												
New Emerging Technologies	140	160	180	200	210	240	90	100	110	120	130	150												

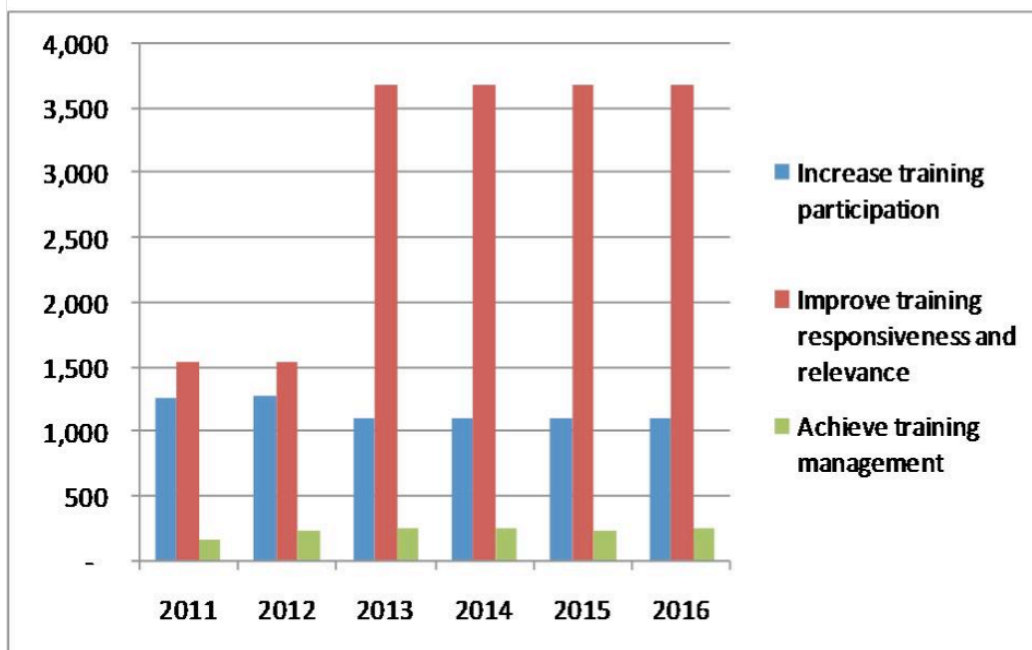
Sector	Graduates					Assessed					Certified							
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
Health and Direct Community Development Services	177,750	140,750	154,800	170,350	187,850	206,150	161,750	133,350	92,500	102,010	113,210	121,950	63,330	71,930	79,440	88,230	97,240	106,800
Health Care Services	51,930	57,090	62,800	69,080	75,990	83,590	31,160	33,620	37,140	41,130	45,490	50,320	26,490	28,750	31,950	35,580	39,580	44,030
Adolescent Health Care	750	880	970	1,070	1,170	1,290	450	530	590	650	710	780	390	460	510	570	620	690
Bookkeeping	5,550	6,160	6,780	7,450	8,200	9,020	3,330	3,700	4,070	4,470	4,920	5,420	2,840	3,170	3,510	3,870	4,290	4,750
Business Information Management	2,560	2,860	3,150	3,460	3,810	4,190	1,550	1,720	1,890	2,080	2,290	2,520	1,320	1,480	1,630	1,800	2,000	2,210
Cosmetology/Beauty Care	21,500	23,650	26,020	28,620	31,480	34,630	12,900	14,190	15,620	17,180	18,890	20,780	10,970	12,140	13,440	14,870	16,440	18,190
Dental Laboratory Technology	990	1,100	1,210	1,330	1,460	1,610	600	660	730	800	880	970	510	570	630	700	770	850
Services	630	660	730	800	880	970	380	400	440	480	530	590	330	350	380	420	470	520
Facial Treatment	1,120	1,210	1,330	1,460	1,610	1,770	680	730	800	880	970	1,070	580	630	690	770	850	940
Fire Brigade Training	1,560	1,760	1,940	2,130	2,340	2,580	940	1,060	1,170	1,280	1,410	1,550	800	910	1,010	1,110	1,230	1,360
First Aid Training	550	660	730	800	880	970	330	400	440	480	530	590	290	350	380	420	470	520
Food Sanitation and Safety	540	550	610	670	730	810	330	330	370	410	440	490	290	290	320	360	390	430
Foot Spa	520	550	610	670	730	810	320	320	370	410	440	490	280	290	320	360	390	430
Hand Spa	500	550	610	670	730	810	300	330	370	410	440	490	260	290	320	360	390	430
Home Care Products Reproduction	800	880	970	1,070	1,170	1,290	480	530	590	650	710	780	410	460	510	570	620	690
Household Services	230	220	240	270	290	320	140	140	150	170	180	200	120	120	130	150	160	180
International Safety	660	770	850	930	1,030	1,130	400	470	510	560	620	680	340	410	440	490	540	600
Janitorial Services	590	660	730	800	880	970	360	400	440	480	530	590	310	350	380	420	470	520
Massage Therapy	580	660	730	800	880	970	350	400	440	480	530	590	300	350	380	420	470	520
Microfinance	580	660	730	800	880	970	350	400	440	480	530	590	300	350	380	420	470	520
Nursing Aide	18,360	20,240	22,260	24,490	26,940	29,630	11,020	12,150	13,360	14,700	16,170	17,780	9,370	10,390	11,490	12,720	14,070	15,560
Office Administration	840	880	970	1,070	1,170	1,290	510	530	590	650	710	780	440	460	510	570	620	690
Pharmacy Services	3,560	3,960	4,360	4,790	5,270	5,800	2,150	2,380	2,620	2,880	3,170	3,480	1,830	2,040	2,260	2,500	2,760	3,050
Practical Nursing	560	660	730	800	880	970	340	400	440	480	530	590	290	350	380	420	470	520
Records Keeping	230	220	240	270	290	320	140	140	150	170	180	200	120	120	130	150	160	180
Safety Training Program and First Aid Application	660	770	850	930	1,030	1,130	400	470	510	560	620	680	340	410	440	490	540	600
Security Services	9,830	10,780	11,860	13,040	14,350	15,780	5,900	6,470	7,120	7,830	8,610	9,470	5,020	5,540	6,130	6,780	7,500	8,290
Other Health and Community Services Courses	1,530	1,740	1,890	2,090	2,290	2,530	920	1,050	1,140	1,260	1,380	1,520	790	900	990	1,090	1,210	1,330
New Emerging Technologies	810	850	970	1,070	1,170	1,290	490	530	590	650	710	780	420	460	510	570	620	690
RAC Window AC/Domestic Ref	810	850	970	1,070	1,170	1,290	490	530	590	650	710	780	420	460	510	570	620	690
RAC Servicing	6,960	7,700	8,470	9,320	10,250	11,270	4,180	4,620	5,090	5,600	6,150	6,770	3,560	3,960	4,380	4,850	5,360	5,930
Transport RAC Servicing	800	880	970	1,070	1,170	1,290	480	530	590	650	710	780	410	460	510	570	620	690
Other HVAC-related courses	70	110	120	130	150	160	50	70	80	80	90	100	100	60	70	80	80	90
New Emerging Technologies	100	120	130	140	160	170	60	80	80	90	100	110	60	70	70	80	80	100

Sector	Full Qualification	Graduates						Assessed						Certified						
		2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016	
		259,819	348,836	433,536	503,763	572,868	643,153	633,520	633,520	633,520	633,520	633,520	633,520	633,520	633,520	633,520	633,520	633,520	633,520	
ICT	Animation	4,980	5,500	6,050	6,660	7,320	8,060	2,990	3,300	3,630	4,000	4,400	4,830	2,550	2,830	3,130	3,460	3,830	4,230	
	Cable TV Installation	260	330	360	400	440	480	160	200	220	240	270	290	180	180	190	210	240	260	
	Computer Aided Design	740	770	850	930	1,030	1,130	450	470	510	560	620	680	390	410	440	490	540	600	
	Computer Based Accountancy	590	660	730	800	880	970	360	400	440	480	530	590	310	350	380	420	470	520	
	Computer Hardware Servicing	71,970	79,200	87,120	95,830	105,420	115,960	43,190	47,520	52,280	57,500	63,260	69,580	36,720	40,630	44,970	49,740	55,040	60,890	
	Computer Programming	78,410	86,240	94,860	104,350	114,790	126,260	47,050	51,750	56,920	62,610	68,880	75,760	40,000	44,250	48,960	54,160	59,930	66,290	
	Computer Science/Operations	28,100	30,910	34,000	37,400	41,150	45,250	16,860	18,550	20,400	22,440	24,690	27,150	14,340	15,870	17,550	19,420	21,490	23,760	
	Contact Center Services	23,320	25,630	28,190	31,010	34,110	37,530	14,000	15,380	16,920	18,610	20,470	22,520	11,900	13,150	14,560	16,100	17,810	19,710	
	Computer Technology Support Services	3,980	4,400	4,940	5,320	5,860	6,440	2,390	2,640	2,910	3,200	3,520	3,870	2,040	2,260	2,510	2,770	3,070	3,390	
	Medical Transcription	1,030	1,100	1,210	1,330	1,460	1,610	620	660	730	800	880	970	530	570	630	700	770	850	
	Software Developer	80	110	120	130	150	160	50	70	80	80	90	100	50	60	70	70	80	90	
	Two-Year Computer Secretarial	6,650	7,370	8,110	8,920	9,810	10,790	3,990	4,430	4,870	5,360	5,890	6,480	3,400	3,790	4,190	4,640	5,130	5,670	
	Visual Graphics Design	2,730	2,970	3,270	3,590	3,950	4,350	1,640	1,790	1,970	2,160	2,370	2,610	1,400	1,540	1,700	1,870	2,070	2,290	
	Other priority ICT-related Courses	320	330	360	400	440	480	200	200	220	240	270	290	170	180	190	210	240	260	
	Livelihood	New Emerging Technologies	2,710	3,070	3,340	3,690	4,050	4,460	1,630	1,850	2,010	2,220	2,430	2,680	1,390	1,590	1,730	1,930	2,120	2,350
Candy Making		710	770	850	930	1,030	1,130	430	470	510	560	620	680	370	410	440	490	540	600	
Dish Washing Liquid Making		10,940	11,990	13,190	14,510	15,960	17,560	6,570	7,200	7,920	8,710	9,580	10,540	5,590	6,160	6,820	7,540	8,340	9,230	
Fabric Conditioner Making		400	440	480	530	590	640	240	270	290	320	360	390	210	240	250	280	320	350	
Fabrication of Toilet Soap		700	770	850	930	1,030	1,130	420	470	510	560	620	680	360	410	440	490	540	600	
Food Processing		19,600	21,560	23,720	26,090	28,770	31,570	11,760	12,440	13,740	15,160	16,720	18,450	10,000	10,640	11,820	13,120	14,550	16,150	
Floor Wax Making		560	660	730	800	880	970	340	400	440	480	530	590	290	350	380	420	470	520	
Laundry Detergent making		780	880	970	1,070	1,170	1,290	470	530	590	650	710	780	400	460	510	570	620	690	
Liquid Bleach Making		2,350	2,640	2,900	3,190	3,510	3,870	1,410	1,590	1,740	1,920	2,110	2,330	1,200	1,360	1,500	1,670	1,840	2,040	
Rag and Herbal Soap Making		610	660	730	800	880	970	370	400	440	480	530	590	320	350	380	420	470	520	
Soap and Candle Making		580	660	730	800	880	970	350	400	440	480	530	590	300	350	380	420	470	520	
Soap Making		1,580	1,760	1,940	2,130	2,340	2,580	950	1,060	1,170	1,280	1,410	1,550	810	910	1,010	1,110	1,230	1,360	
Business Orientation and Livelihood Training		270	330	360	400	440	480	170	200	220	240	270	290	150	180	190	210	240	260	
Other Livelihood-related Courses		1,050	1,210	1,330	1,460	1,610	1,770	630	730	800	880	970	1,070	540	630	690	770	860	940	
Logistics		New Emerging Technologies	490	550	600	670	730	810	300	330	360	410	440	490	260	290	310	360	390	430
	Cargo Handling	1,150	1,240	1,330	1,420	1,520	1,630	720	780	840	900	970	1,050	620	680	730	790	850	920	
	Other Logistics-related courses	900	990	1,090	1,200	1,320	1,450	540	600	660	720	800	870	460	520	570	630	700	770	
	New Emerging Technologies	10	10	20	20	20	20	10	20	20	20	20	20	20	20	20	20	20	20	
	Maritime	Deck Seafaring	2,550	2,860	3,150	3,460	3,810	4,190	1,530	1,720	1,890	2,080	2,290	2,520	1,310	1,480	1,630	1,800	2,000	2,210
		Engine Seafaring	1,360	1,540	1,690	1,860	2,050	2,260	820	930	1,020	1,120	1,230	1,360	700	800	880	970	1,080	1,190
		Marine Electricity	340	330	360	400	440	480	210	200	220	240	270	290	180	180	190	210	240	260
		Seafarer-Catering/Stewarding	270	330	360	400	440	480	170	200	220	240	270	290	150	180	190	210	240	260
		Seafarer's Rating Course	750	880	970	1,070	1,170	1,290	450	530	590	650	710	780	390	460	510	570	620	690
		New Emerging Technologies	60	70	80	90	100	110	40	50	50	60	60	70	40	50	50	60	60	60

Sector	Graduates					Assessed					Certified							
	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016
Full Qualification	6,633	7,008	8,179	8,633	9,348	10,193	50,160	43,940	47,844	51,863	57,130	62,873	33,350	38,710	41,848	44,950	48,748	52,869
Manufacturing	560	660	730	800	880	970	340	400	440	480	530	590	290	350	380	420	470	520
Basic CNC Milling	1,750	1,870	2,060	2,260	2,490	2,740	1,050	1,130	1,240	1,360	1,500	1,650	900	970	1,070	1,180	1,310	1,450
Instrumentation and Control	5,630	6,160	6,780	7,450	8,200	9,020	3,380	3,700	4,070	4,470	4,920	5,420	2,880	3,170	3,510	3,870	4,290	4,750
Lathe Machine Operation	2,470	2,750	3,030	3,330	3,660	4,030	1,490	1,660	1,820	2,000	2,200	2,420	1,270	1,420	1,570	1,730	1,920	2,120
Manufacturing Engineering Technology	1,760	1,980	2,180	2,400	2,640	2,900	1,060	1,190	1,310	1,440	1,590	1,740	910	1,020	1,130	1,250	1,390	1,530
Mechatronics Servicing	540	550	610	670	730	810	330	330	370	410	440	490	290	290	320	360	390	430
Metal Engraver(Pantograph)	500	550	530	610	670	730	810	330	370	410	440	490	260	290	320	360	390	430
Metal Machining Technology	280	330	360	400	440	480	170	200	220	240	270	290	150	180	190	210	240	260
Reinforced Steel Bar Installation	1,430	1,540	1,690	1,860	2,050	2,260	860	930	1,020	1,120	1,230	1,360	740	800	880	970	1,080	1,190
Technical Drafting	48,710	53,570	58,930	64,820	71,300	78,430	28,230	32,150	35,360	38,900	42,780	47,060	24,850	27,490	30,410	33,650	37,220	41,180
Welding	610	660	730	800	880	970	370	400	480	530	590	640	320	350	380	420	470	520
Other Metals and Engineering-related Courses	780	880	960	1,060	1,160	1,280	470	530	580	640	700	770	400	480	500	560	610	680
New Emerging Technologies	13,830	19,330	23,830	28,830	34,830	40,830	19,870	21,930	23,830	25,470	28,130	30,830	16,130	18,030	19,830	22,230	24,830	27,830
Tourism	19,410	21,230	23,350	25,690	28,260	31,080	11,650	12,740	14,010	15,420	16,960	18,650	9,910	10,900	12,050	13,340	14,760	16,320
Baking/Pastry	1,600	1,650	1,820	2,000	2,200	2,420	960	990	1,100	1,200	1,320	1,460	820	850	950	1,040	1,150	1,280
Culinary Arts	159,610	175,450	193,000	212,300	233,520	256,880	95,770	105,270	115,800	127,380	140,120	154,130	81,410	90,010	99,590	110,190	121,910	134,870
Commercial Cooking	39,520	43,340	47,670	52,440	57,690	63,450	23,720	26,010	28,610	31,470	34,620	38,070	20,170	22,240	24,610	27,230	30,120	33,320
Bartending/Barista	45,680	50,160	55,180	60,690	66,760	73,440	27,410	30,100	33,110	36,420	40,060	44,070	23,300	25,740	28,480	31,510	34,860	38,570
Housekeeping	16,410	17,930	19,720	21,700	23,870	26,250	9,850	10,760	11,840	13,020	14,330	15,750	8,380	9,200	10,190	11,270	12,470	13,790
Tour Guide Services	10,440	11,330	12,460	13,710	15,080	16,590	6,270	6,800	7,480	8,230	9,050	9,960	6,440	6,820	7,320	7,880	8,520	9,240
Front Office Services	6,270	6,710	7,380	8,120	8,930	9,820	3,770	4,030	4,430	4,880	5,360	5,900	3,210	3,450	3,810	4,230	4,670	5,170
Waitering	17,100	18,700	20,570	22,630	24,890	27,380	10,260	11,220	12,350	13,560	14,940	16,430	8,730	9,600	10,630	11,750	13,000	14,380
Other Tourism-related Courses	3,840	4,330	4,710	5,210	5,710	6,300	2,310	2,600	2,830	3,130	3,430	3,780	2,230	2,440	2,710	2,990	3,310	3,610
New Emerging Technologies	3,840	4,330	4,710	5,210	5,710	6,300	2,310	2,600	2,830	3,130	3,430	3,780	2,230	2,440	2,710	2,990	3,310	3,610
Aviation	380	440	480	530	590	640	230	270	290	320	360	390	200	240	250	280	320	350
Aircraft Mechanic	50	60	70	80	90	100	30	40	50	60	70	80	30	40	50	60	70	80
Aviation Electronics	330	330	360	400	440	480	200	200	220	240	270	290	170	180	190	210	240	260
Basic Defensive Driving	770	880	970	1,070	1,170	1,290	470	530	590	650	710	780	400	460	510	570	620	690
Basic Electricity	580	660	730	800	880	970	350	400	440	480	530	590	300	350	380	420	470	520
Gas Engine Tune Up	690	770	850	930	1,030	1,130	420	470	510	560	620	680	360	410	440	490	540	600
Light Vehicle Driving	2,330	2,530	2,780	3,060	3,370	3,700	1,400	1,520	1,670	1,840	2,030	2,220	1,190	1,300	1,440	1,600	1,770	1,950
Motorcycle/Small Engine Servicing	90	110	120	130	150	160	60	70	80	90	100	100	60	60	70	70	80	90
Pre and post operation for earth moving equipment	70	110	120	130	150	160	50	70	80	80	90	100	50	50	60	70	80	90
Other Transport-related Courses	60	70	80	90	100	110	40	50	50	60	60	70	40	40	50	60	60	70
New Emerging Technologies	6,110	6,710	7,310	7,910	8,510	9,110	3,110	3,510	3,910	4,310	4,710	5,110	2,510	2,910	3,310	3,710	4,110	4,510
Wholesale	3,060	3,410	3,750	4,130	4,540	4,990	1,840	2,050	2,250	2,480	2,730	3,000	1,570	1,760	1,940	2,150	2,380	2,630
Salesman/Saleslady (SalesClerk)	2,350	2,530	2,780	3,060	3,370	3,700	1,410	1,520	1,670	1,840	2,030	2,220	1,200	1,300	1,440	1,600	1,770	1,950
Stockman/Stockclerk	540	550	610	670	730	810	330	330	370	410	440	490	290	290	320	360	390	430
Warehouseman	280	330	360	400	440	480	170	200	220	240	270	290	150	180	190	210	240	260
Other Wholesale-related Courses	80	90	90	100	110	120	50	60	60	60	70	80	50	60	60	60	70	70
New Emerging Technologies	80	90	90	100	110	120	50	60	60	60	70	80	50	60	60	60	70	70

**B. TESDA Investment Requirements
by Strategic Objective, 2011-2016**

Investment Requirements by Strategic Objective 2011-2016



Investment Requirements 2011 – 2016

(in million pesos)

Summary

	2011	2012	2013	2014	2015	2016
A. Increase training participation	1,264	1,279	106.6	1,107	1,110	1,110
B. Improve training responsiveness and relevance	1,550	1,550	3,679*	3,679*	3,685*	3,685*
C. Achieve effective training management	178	235	254	255	252	255
TOTAL	2,992	3,064	5,040	5,041	5,047	5,050

*Subject to the approval of TWSP budget

Objectives/Strategies	Indicators	Measurable Outputs / Targets										BUDGET (in million pesos)			
		2011	2012	2013	2014	2015	2016	2011	2012	2013	2014	2015	2016		
3.2.7 Develop and implement programs intended for green jobs	No. of trainers and administrators developed to implement "green skills" programs "Green Skills" programs implemented	Skills / program to be identified	Depends on skills to be identified	Depends on skills to be identified	Depends on skills to be identified	Depends on skills to be identified	Depends on skills to be identified	0.50	1.00	2.00	2.00	2.00	2.00	2.00	
3.3 Sustain research and development	Up to date labor market information available and accessible to the public and TVIs System Enhanced	Implemented	Implemented	Implemented	Implemented	Implemented	Implemented	8.60	8.60	8.60	8.60	8.60	8.60	8.60	
3.3.1 Intensify gathering, analysis and dissemination of labor market information	No. of LMI Reports published / month	12	12	12	12	12	12	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	No. of implementors trained in data gathering and analysis	Training needs survey	110	115				0.20	2.20	2.50					
3.3.2 Strengthen research and development in TVET	R&D in TVET institutions and TESDA institutionalized Capability building program in R&D implemented Active partnerships with local and foreign research and funding institutions	Institutionalized 25 Administrators Partnerships activated	Institutionalized 50 Implemented	Institutionalized 50 Implemented	Institutionalized 50 Implemented	Institutionalized 50 Implemented	Institutionalized 50 Implemented	20.00 0.50 0.20	20.00 1.00 0.20	20.00 1.00 0.20	20.00 1.00 0.20	20.00 1.00 0.20	20.00 1.00 0.20	20.00 1.00 0.20	
TOTAL								2992.00	3064.00	5040.00	5041.00	5047.00	5050.00		



Technical Education and Skills Development Authority

**Office of the Deputy Director General for Sectoral TVET
East Service Road, South Superhighway, Taguig City
Metro Manila 1630
www.tesda.gov.ph
Telefax Nos. (632) 892-6918 / 888-5652**